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TM5-9320

WAR DEPARTMENT MAINTENANCE MANUAL AND PARTS CATALOG

SPRAYER ATTACHMENT, PAINT,
PNEUMATIC, MODEL E-1A & E-1B

BINKS MFG. CO.

CHICAGO, ILL.

JUNE 8, 1943

WARNING

SPARE PARTS can be supplied promptly and accurately only if positively identified by correct part number and correct part name.

FURNISH THIS INFORMATION ON ALL REQUISITIONS.

WITHOUT FAIL, on all requisitions, give name of machine, name of manufacturer, model or size, manufacturer's serial number of each machine and subassemblies attached to machine, and components and accessories for which spare parts are required.

List spare parts for only one make or kind of machine on each requisition.

Requisitions must be double spaced to provide room for office notations when necessary.

CQD SPR 304

TM5-9320

WAR DEPARTMENT

TM5-9320, Maintenance Manual and Parts Catalog, Sprayer Attachment, Paint, Pneumatic, Model E-1A & E-1B, published by the Binks Mfg. Co., is furnished for the information and guidance of all concerned.

(AG 062.11 (6 '3/43) PC (C). JUNE 10, 1941.)

G. C. MARSHALL,
Chief of Staff.

Official:
J. A. ULIO,
Major General,
The Adjutant General.

**OPERATOR'S MANUAL
MAINTENANCE MANUAL
PARTS LIST
FOR
BINKS
SPRAYER ATTACHMENT,
PAINT, PNEUMATIC
MODEL E-1A
AND
MODEL E-1B**

PURCHASE ORDER NUMBER — DA-1525-C

PURCHASE ORDER NUMBER — C-3333

PURCHASE ORDER NUMBER — C-4623

PURCHASE ORDER NUMBER — C-4798

**BINKS MANUFACTURING COMPANY
3114 CARROLL AVE.
CHICAGO, ILLINOIS**



W. A. C. 100

FOREWORD

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How to Use This Manual

Read all instructions carefully before attempting to spray with this equipment. This book contains complete and valuable information on painting, maintenance and repair.

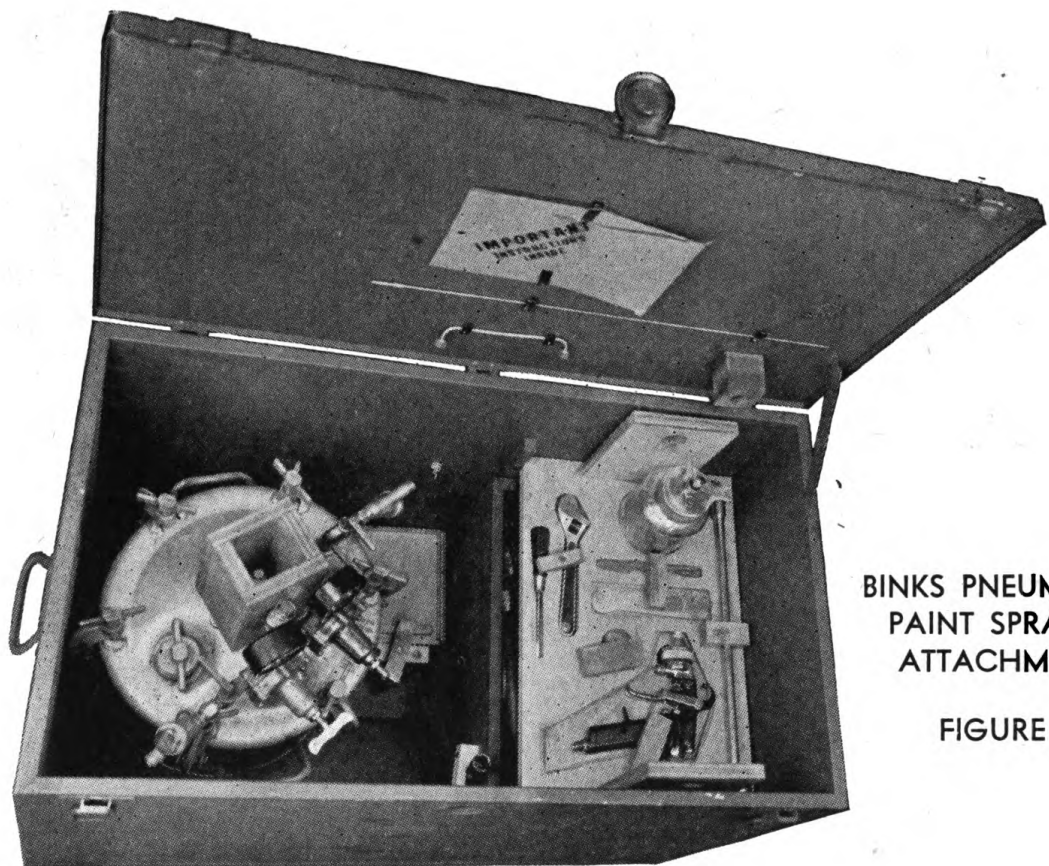
Experience has proven that long and satisfactory service is usually the result of the operator's knowledge of correct operating methods and his diligence in applying this knowledge.

Give the equipment the same care and consideration that you would give any delicate precision built machine and it will give you long and faithful service.

BINKS MANUFACTURING COMPANY

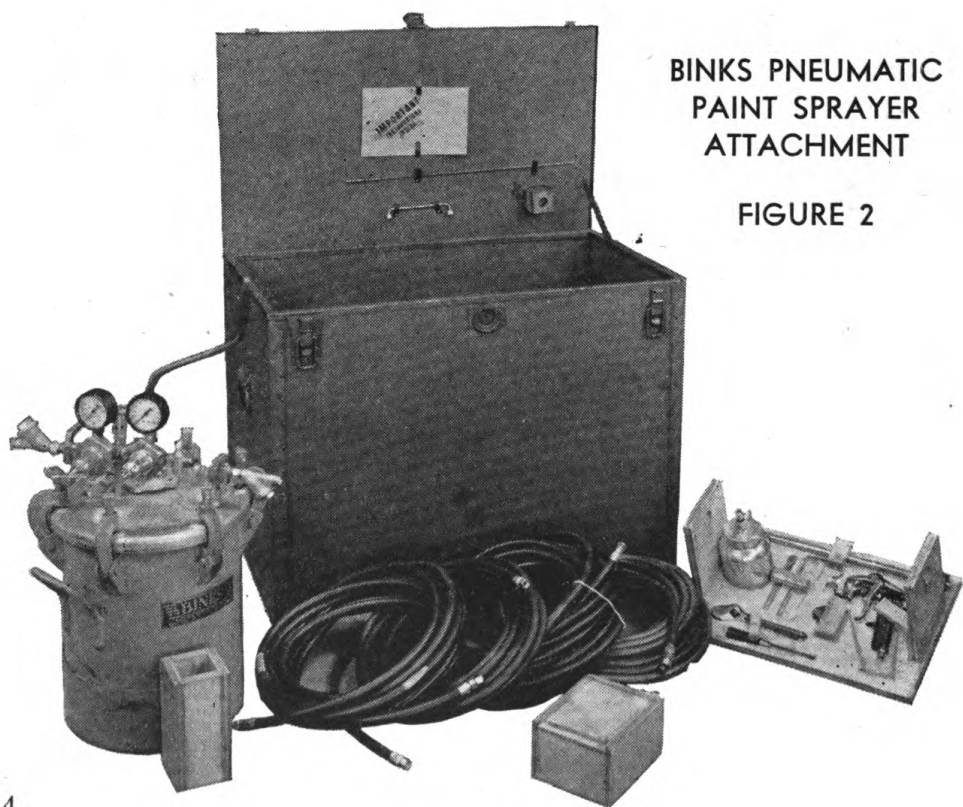
CHICAGO, ILLINOIS

M574576



BINKS PNEUMATIC
PAINT SPRAYER
ATTACHMENT

FIGURE 1



BINKS PNEUMATIC
PAINT SPRAYER
ATTACHMENT

FIGURE 2

NOTE: Binks E-1A and E-1B Outfits are essentially the same. The E-1A is furnished with Binks Thor 7 Spray Gun and accessories, while the E-1B Outfit is equipped with Binks Thor 17-A Spray Gun and Accessories.

BINKS MODEL E-1A AND E-1B PAINT SPRAY OUTFITS

Purpose and Features

The Binks Model E-1A and E-1B Paint Spray Outfits are portable units, which contain all necessary equipment needed to paint spray when a supply of compressed air is available. By referring to Figures 1 and 2 it will be noted that the following items are contained in the chest:

1. A spray gun for applying the paint.
2. A pressure tank equipped with two regulators for holding the paint and regulating the air pressure at the gun and the flow of paint to the gun.
3. A pressure cup for holding the paint when the surface to be covered is comparatively small.
4. An extension which when attached to the gun allows the operator to paint places that cannot be reached with the spray gun alone.
5. A set of hoses for interconnecting the above equipment and also to connect to a supply of compressed air.
6. A set of tools and repair parts necessary to make minor adjustments and repairs.

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SECTION I

OPERATOR'S MANUAL

FOR

BINKS

SPRAYER ATTACHMENT,

PAINT, PNEUMATIC

MODEL E-1A

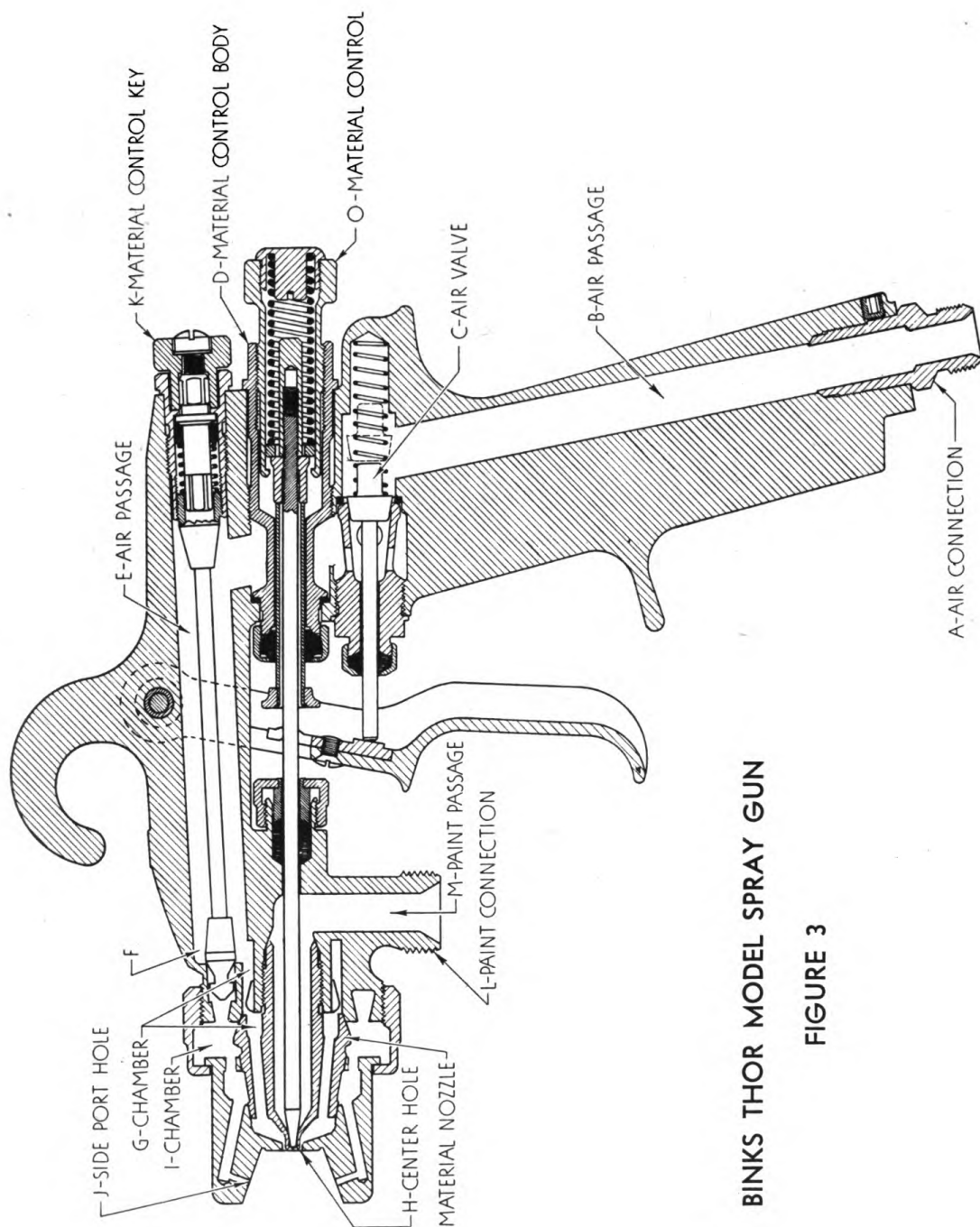
AND

MODEL E-1B



BINKS MANUFACTURING COMPANY

CHICAGO, ILLINOIS



BINKS THOR MODEL SPRAY GUN

FIGURE 3

OPERATING PRINCIPLE OF THE BINKS THOR MODEL SPRAY GUNS

The Binks Thor Model No. 7 and 17-A Guns are devices used to break up or atomize the paint and deposit it evenly and quickly on the surface of the object being covered. By referring to Figure 3 the operation of a gun can be best explained as follows:

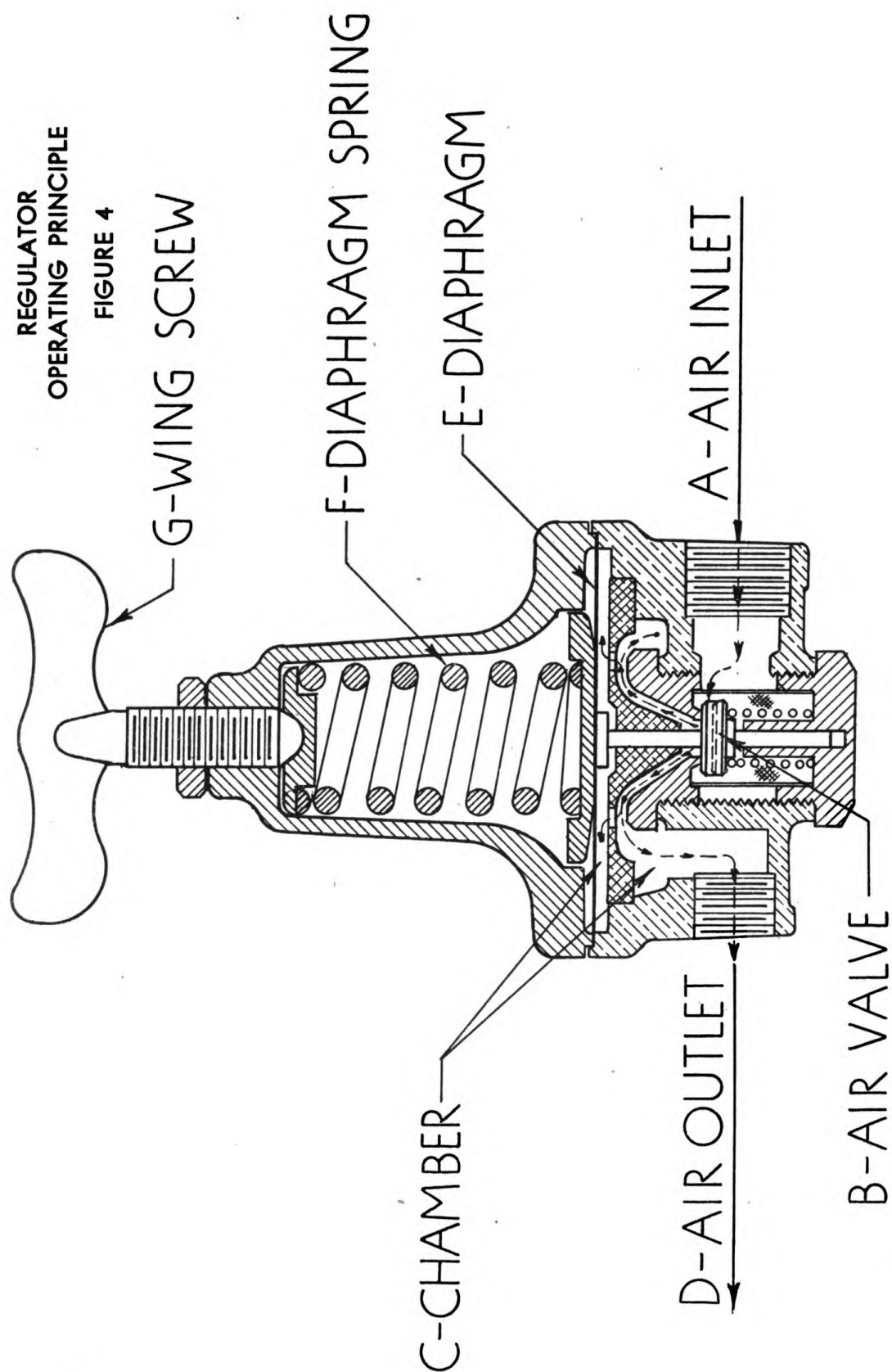
The air hose connects at the bottom of the handle to the connector "A." The air entering through the hose travels up the air passage "B" to the air valve "C." When the trigger is pulled, the air valve "C" moves to the position indicated by the dotted outline, allowing the air to pass through the valve and up and around the material control body "D" and into the air passage "E." The air travels forward to point "F" where it divides, a part entering chamber "G" and from there through the material nozzle and out the center hole "H" of the air nozzle. The other portion of the air enters chamber "I" and travels forward and out the side portholes "J." The amount of air passing through the side portholes of the external mix nozzle is controlled by the side port control Key K.

When this air is shut off the resulting spray is round. As the amount of air is increased by turning the control key "K" counter clockwise, the spray will change to a fan shape. The more the key is turned, the wider the fan.

The material or paint enters the gun at the connection "L," moves up passage way "M" through the center of the material nozzle and out the center hole. The trigger is arranged so that when it is pulled, the air valve opens first and then the material needle. The travel of the trigger which in turn controls the material opening is regulated by the material control assembly "O." The further it is screwed in the smaller the material opening and the smaller the amount of paint deposited on the object being sprayed.

REGULATOR
OPERATING PRINCIPLE

FIGURE 4



OPERATING PRINCIPLE OF THE BINKS PRESSURE TANK

The pressure tank is a container to hold the material, provide a means to keep it mixed, and feed it to the gun at a constant pressure. This is accomplished by allowing air to enter the sealed tank at the top, which exerts its pressure on the material, and forces it up the material tube through the strainer into the hose and to the gun. The pressure of the air in the tank is the material pressure and it is regulated by the regulating unit. The regulator can best be explained by referring to the sectional view of a regulator figure (4).

Air enters the regulator at "A," passes valve "B" and into chamber "C" and then out passage "D." As the air pressure in chamber "C" increases due to the air not being used, or not used as fast as it is passing by the valve "B," the pressure in this chamber will build up and exert a force on the diaphragm "E." As this pressure is increased, the force will overcome the tension of spring "F," allowing the diaphragm to move up, which means that the seat "B" will follow it shutting off the flow of air. When air is again used, the pressure in chamber "C" will drop and the spring will press the diaphragm and the seat down, allowing air to flow again. As these movements are small and rapid, the pressure of the air passing through the regulator is controlled very accurately. The magnitude of the regulated air can be adjusted by the wing screw "G." By screwing it down, the tension of the spring "E" is increased which in turn requires a greater pressure in chamber "C" before the valve "B" will close and shut off the flow of air.

OPERATING PRINCIPLE OF THE BINKS PRESSURE CUP

The pressure cup is a one quart container which can be attached to the gun for use when only small amounts

of paint are to be sprayed. Its operation is similar to the pressure tank in that air pressure is used to force the paint up into the gun. It differs, in that the air pressure used to force the paint into the gun cannot be regulated and the air pressure used for atomizing the paint is also the material pressure.

OPERATING PRINCIPLE OF BINKS 7EAX EXTENSION

The extension is a device which is readily attached to the spray gun and is used to spray places which cannot be reached with the spray gun alone. The extension base is so constructed that when the standard air and material nozzle of the gun are removed and the extension attached, the material will flow through a center tube and the air around the center tube and inside the outer tube to the head. Here the flow of material is controlled by the material needle valve operated from the gun as is the air (see explanation of gun). When the trigger is pulled, the air and material flow forward and are mixed in the nozzles on the extension head and the air will atomize the material and eject it in the form of a fan spray.

SAFETY PRECAUTIONS:

1. Never spray indoors without a mask or without plenty of ventilation.
2. Never connect to a compressed air line with over a 150 pound gauge pressure.
3. Never use over 50 pound gauge pressure when using cup.
4. Never loosen clamps on pressure tank unless the gauges read zero.
5. Never use corrugated air hose for material.

OPERATING INSTRUCTIONS

Preparing Outfit for Use

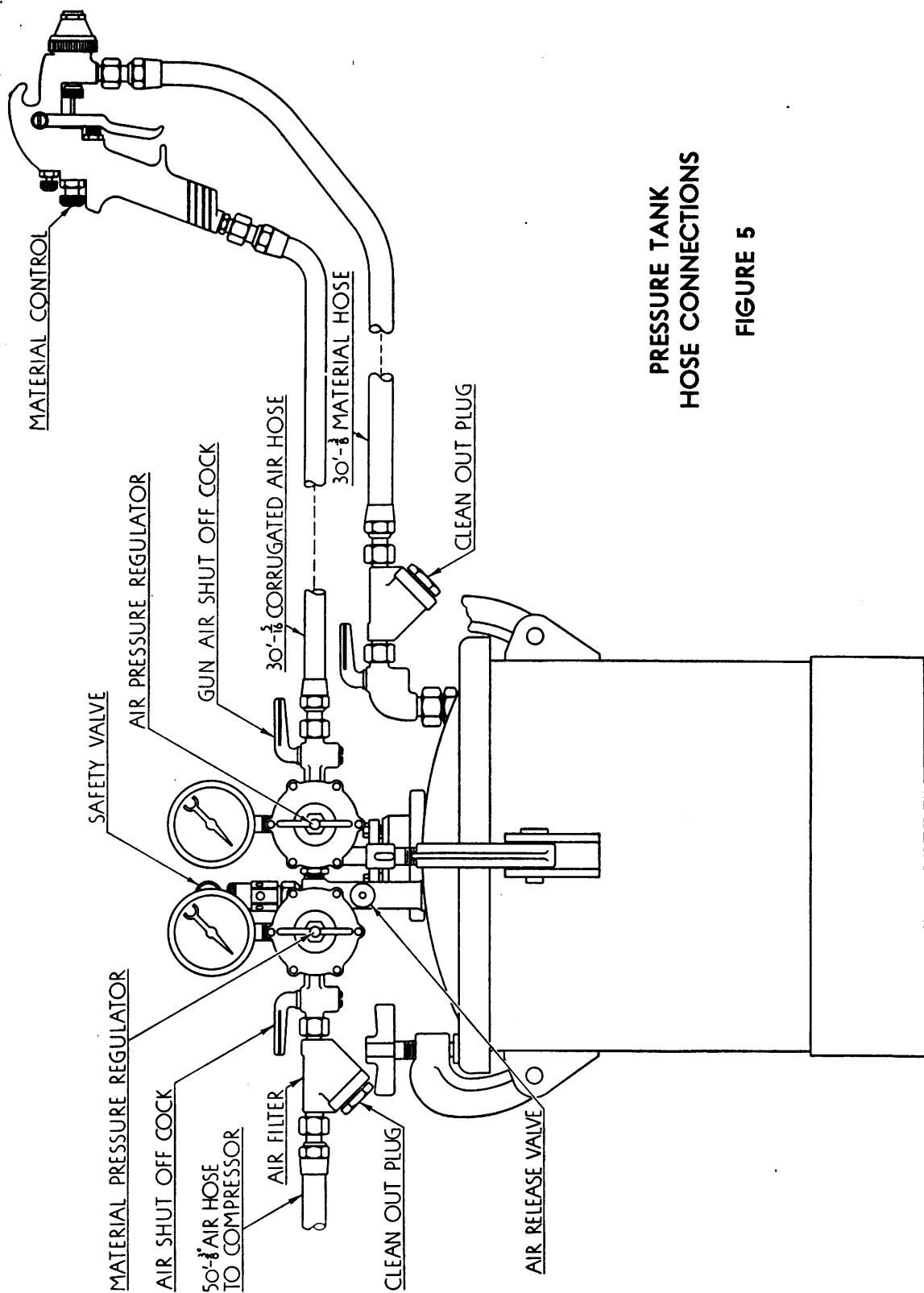
When the equipment is shipped it is completely processed to prevent corrosion and rust. Therefore, before it can be used it must be washed in any oil dissolving solvent, such as gasoline or kerosene.

Use With Pressure Tank

To prepare the outfit for use with the pressure tank the arrangement of the hose should be as illustrated in Figure 5. Connect the 50 foot length of $\frac{3}{8}$ air hose to the air control inlet, and the other end with the quick detachable coupling to the supply of compressed air. **BE SURE THIS SUPPLY DOES NOT HAVE OVER 150 POUNDS PRESSURE.** The 30 foot length of $\frac{3}{8}$ material hose (smooth cover) should be connected from the paint outlet on the tank to the paint inlet on the gun. The 30 foot length of $\frac{5}{16}$ air hose (corrugated cover) should connect from the air control outlet on the tank to the air inlet on the gun. **NEVER USE THE CORRUGATED HOSE FOR PAINT** as the solvent in the paint will cause the rubber lining to swell and stop any flow through it. The material hose which is made for use with paints has a Thiokol synthetic rubber lining to resist the action of solvents.

The pressure tank has a capacity of five gallons and is equipped with two regulators for setting and controlling the pressures. It is only necessary to screw the regulator wing screw in to increase the pressure and out to decrease. In decreasing the material pressure it will be necessary to open the air release valve and allow the air in the tank to escape before the pressure will drop.

The agitator paddles and handle are only meant to **keep** the material in the tank in a mixed condition. Therefore, any paint or other materials to be sprayed should be thoroughly mixed before placing in tank.



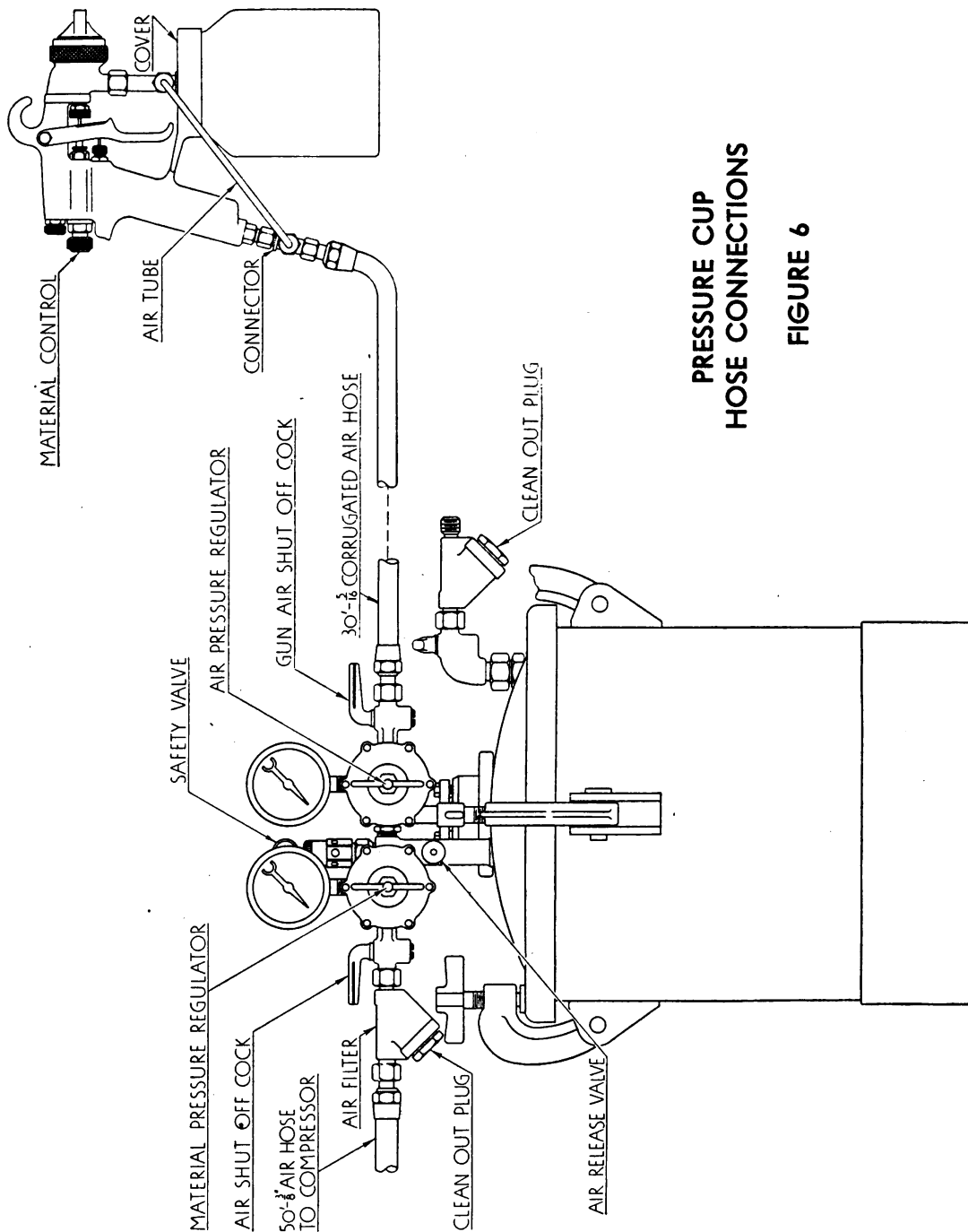
**PRESSURE TANK
HOSE CONNECTIONS**
FIGURE 5

CLEANING TANK AND GUN

After each use, the equipment should be cleaned in the following manner:

1. Turn the material pressure regulator counter clockwise until all tension is released.
2. Open the air release valve allowing all trapped air to escape.
3. "Blow back" gun by placing a rag over air nozzle of the gun and pulling trigger. This will cause the air from gun to force all paint in hose back into the tank.
4. Remove tank cover, put material back in original container, and clean tank with a solvent soaked rag.
5. Place a small amount of solvent in tank and replace cover.
6. Turn in material regulator wing screw forcing the clean solvent through the hose to the gun.
7. Spray the clean solvent for a moment; then repeat Operations 1 to 4.
8. Remove air nozzle and clean it and the material nozzle with the solvent.

The tank is equipped with an air filter and a material strainer. These are identical in construction—the only difference being the felt which is placed in the air filter. It will be necessary to clean these items at regular intervals which will be determined by the material being used and the humidity and dust condition of locality. To clean the strainer, it is only necessary to remove the clean-out plug and wash the screen in a solvent. The same is true of the filter except that the felt, if it is very dirty or badly deteriorated, should be replaced with a new one—(a supply is included in the spare parts box).



**PRESSURE CUP
HOSE CONNECTIONS**

FIGURE 6

PRESSURE CUP

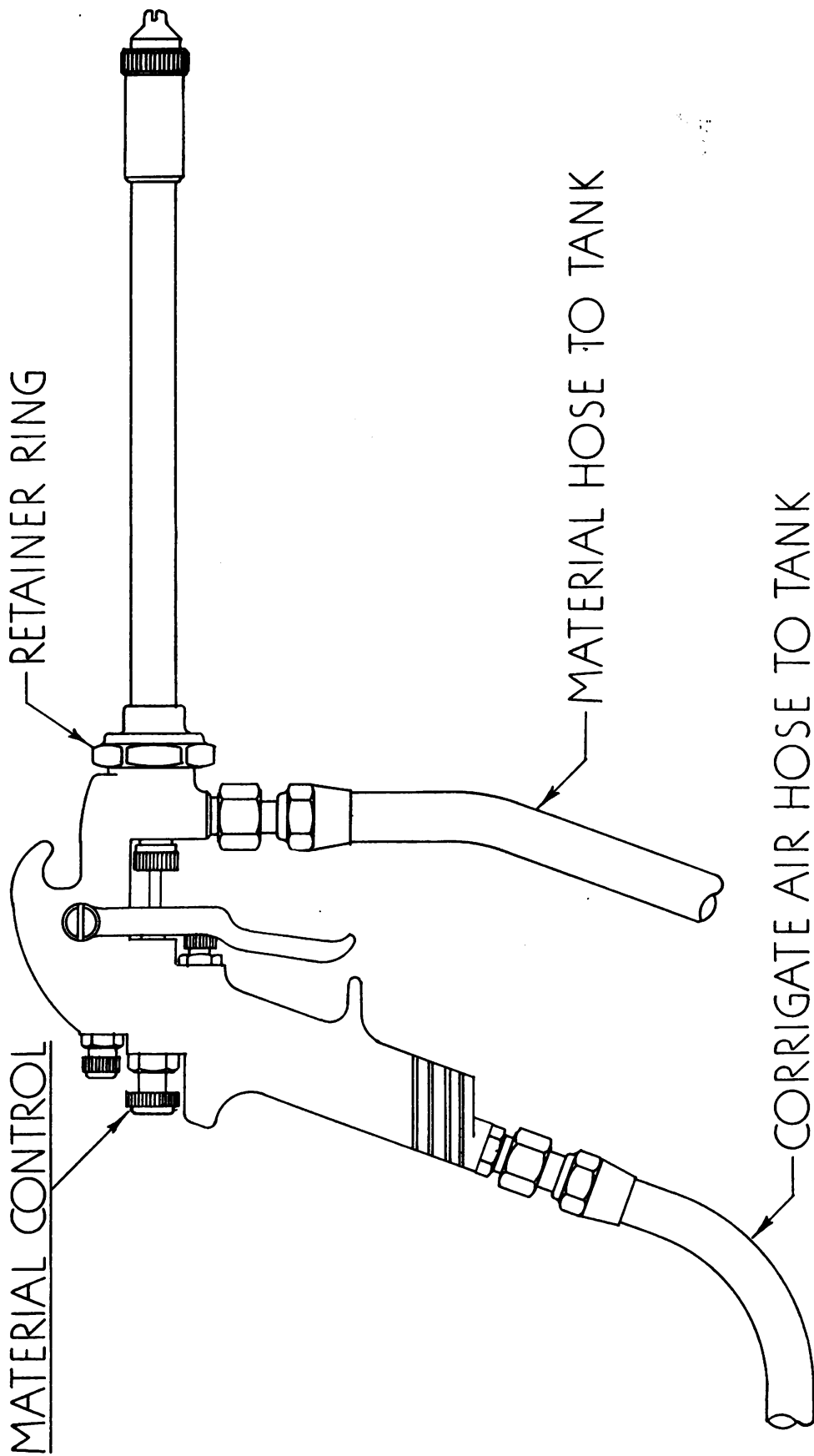
The pressure cup has a one quart capacity and is attached directly to the gun. To mount the cup and hoses (see Figure 6) the following procedure should be used:

Mount cup cover to material inlet of gun, mount air connection to air inlet of gun, place air tube between cover and connection and tighten all nuts. The air hose leading to the gun, when using the cup, must be so connected as to lead from the pressure tank, so that the air pressure can be regulated. It is important that this be done, as a **MAXIMUM AIR PRESSURE OF FIFTY POUNDS IS ALL THE CUP WILL SAFELY STAND.**

EXTENSION

To install the extension (Figure 7) it is necessary to disassemble the gun by removing the air nozzle, material nozzle, the material control screw and the material needle. (See procedure outlined in maintenance section.) After these parts are removed, the extension can be mounted on the front of the gun and the retainer ring tightened. The needle valve is then inserted from the back of the gun and the material control screw replaced. At times it may be necessary to adjust the needle valve because of wear. To adjust the needle it should be removed from the gun and the lock nuts loosened and set to a position so that when the needle is replaced in the gun and the trigger pulled, the trigger will contact the air valve stem first and move it about $1/32$ to $1/16$ inch before contacting the needle valve.

To clean the extension, the same procedure should be followed as in cleaning the gun by blowing back and then flushing with solvent.



EXTENSION MOUNTING

FIGURE 7

How to Spray

The first requirement for a good resultant finish is the proper handling of the gun. The gun should be held perpendicular to the surface being covered and moved in even strokes parallel with it. See Figures (8 and 9). The stroke should be started before the trigger is pulled and released before the stroke is finished. This is easy and gives accurate control of the gun and material. The distance the gun is held from the surface being covered is determined by the material and atomizing pressure, and will vary from 6 to 12 inches, but the material deposited should always be even and wet. If the gun is moved in the horizontal plane, the air nozzle should be turned so that the fan spray has its long axis up and down or at right angles to the motion of the gun. This is accomplished by loosening the knurled ring on the air nozzle and turning the nozzle to the required position and then tightening the ring.

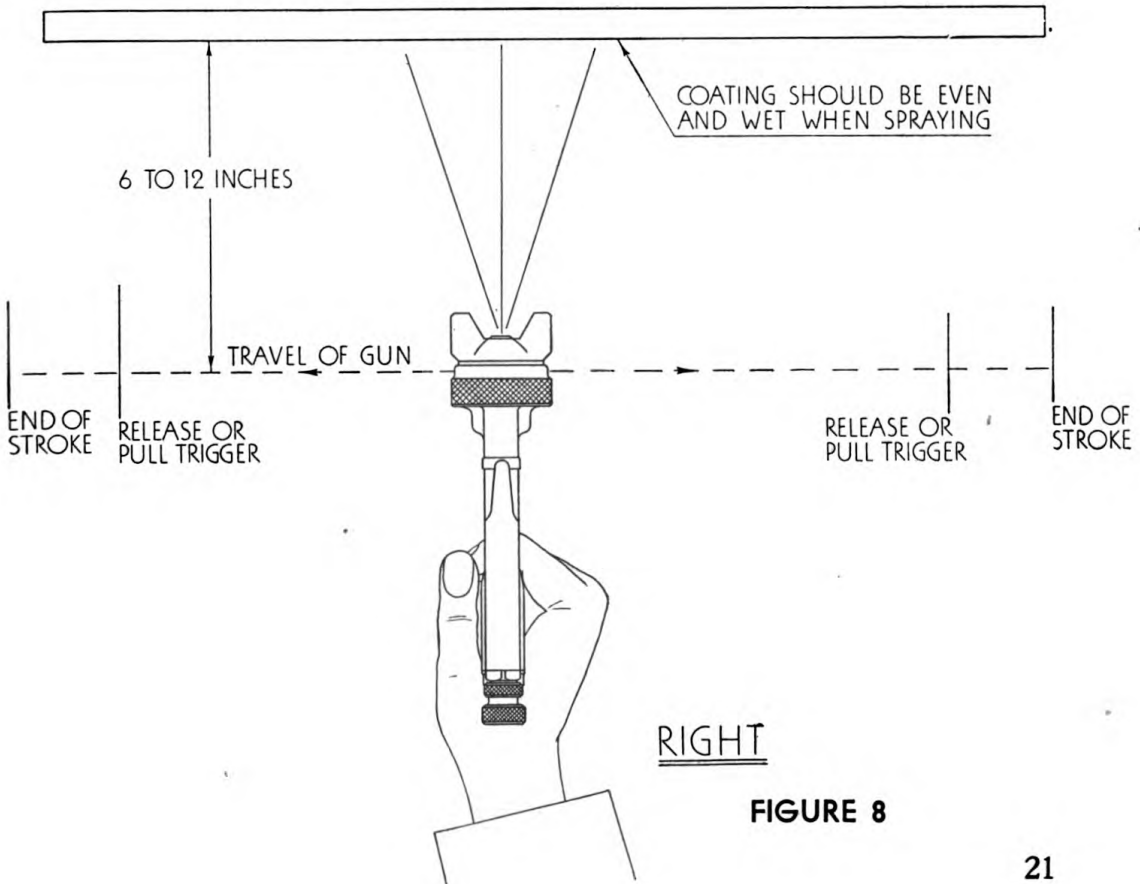
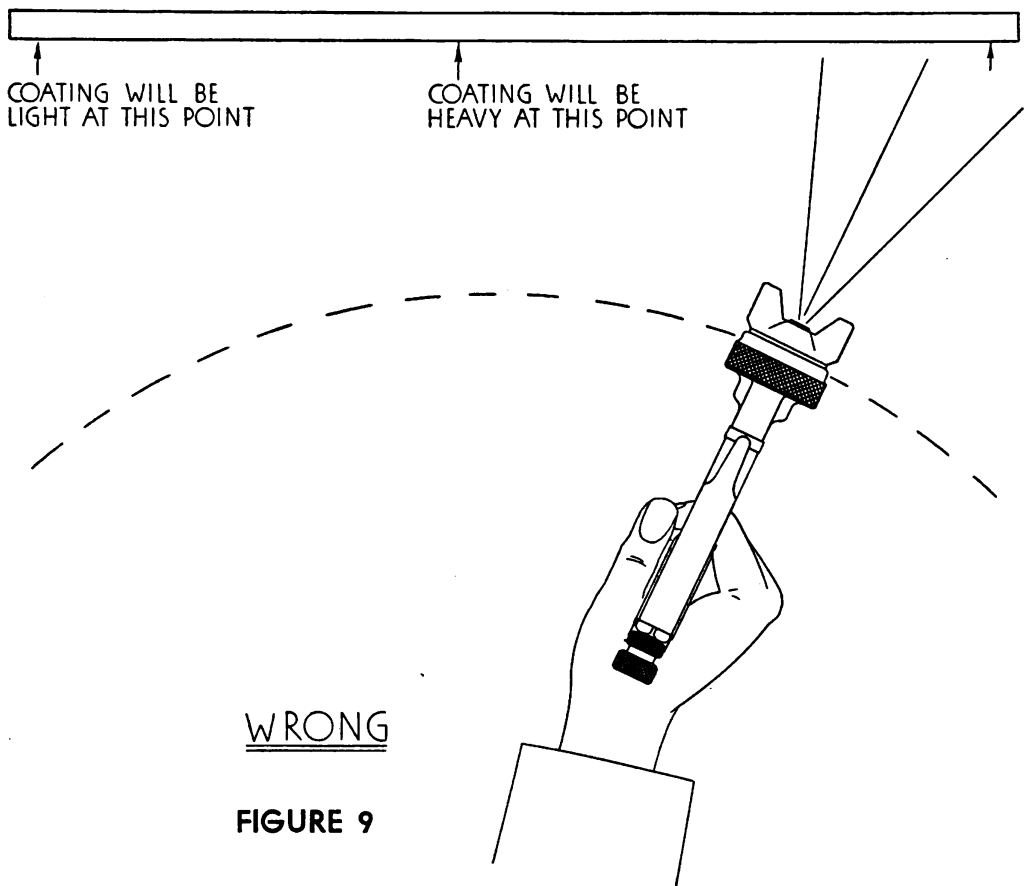


FIGURE 8



The spray gun is shipped equipped with an internal mix nozzle and an external mix nozzle is supplied in the spare parts packed in the chest.

The external mix can be identified by the two ears projecting forward. In this type of nozzle the air and paint are mixed outside the nozzle and its main characteristic is that the resultant spray can be varied from a round cone spray to a flat fan spray. This is accomplished (see Fig. 3) by the side port control key, but it must be remembered that as the fan is made wider, the material used should also be increased to get the same coverage.

In the internal spray nozzle the paint and air are mixed inside the nozzle and the fan spray will be the result—it cannot be changed. When this type of nozzle is used, the air pressure and the material pressure must be equal.

Recommended Pressures

The recommended pressures for the air and material when using paints, lacquers, or synthetics are:

Type of Nozzle	Air Pressure	Material Pressure
Internal Mix	40 to 60	40 to 60
External Mix	40 to 60	5 to 15

TROUBLES ENCOUNTERED IN SPRAYING

The most common causes of poor finish when spraying, if the gun is properly handled, are: spitting, faulty patterns and improper setting of the air and material controls.

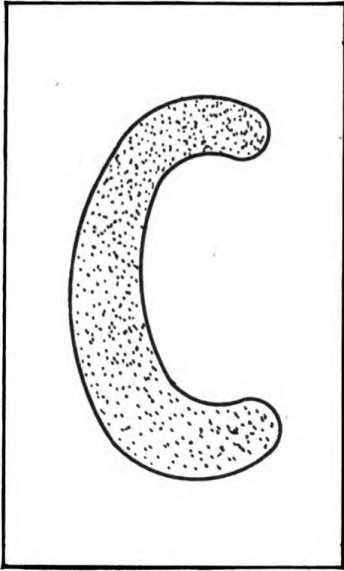
Spitting

Spitting may be defined as a jerky intermittent or fluttering spray. It is caused by air bubbles in the paint and the following should be checked to correct the trouble:

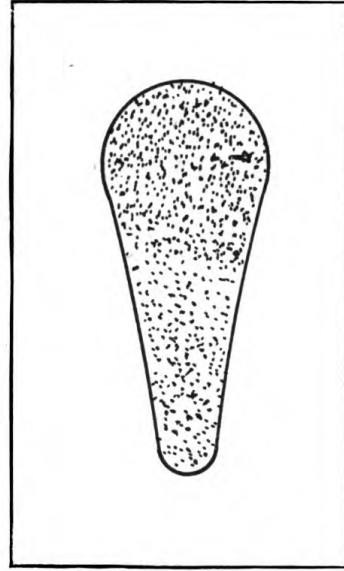
1. **Loose needle packing nut or dried out packing.** To correct, back up packing nut, place two drops of machine oil on packing, replace nut and tighten only with fingers. In aggravated cases replace the packing.
2. **Damaged or loose material nozzle, or dirt between material nozzle and gun body.** If the nozzle seat is damaged it must be replaced. A spare is provided in the spare parts box. If dirty or loose, remove nozzle, clean back of nozzle and nozzle seat in gun with rag wet with solvent. Replace nozzle and draw tightly against body.
3. **Loose hose connection.** To correct make sure all connections are clean and tight.
4. **Empty material container.** This is exactly like running out of gas for your engine. To correct, simply fill tank or cup with a sufficient supply of material.

FAULTY PATTERNS

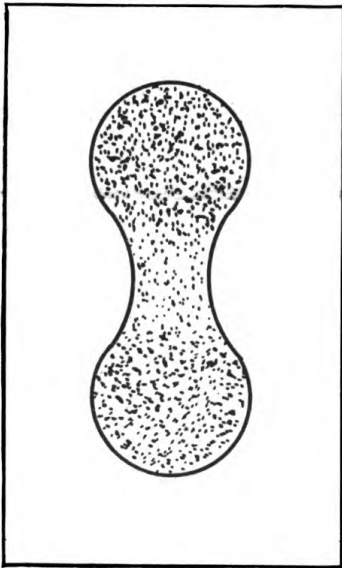
FIGURE 10



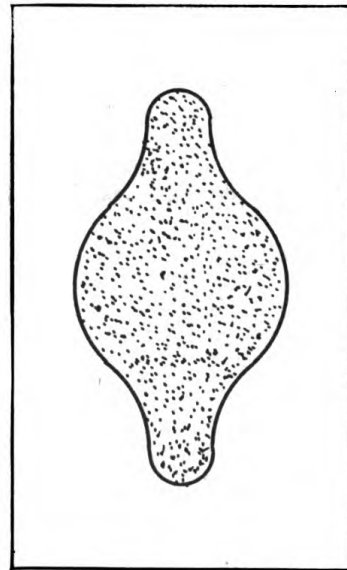
TYPE A



TYPE B



TYPE C



TYPE D

Faulty Patterns

By referring to Figure 10, the different types of distorted spray patterns that may be obtained with an external mix nozzle are illustrated. To check the spray pattern of a gun, select a flat surface with a color different than that of the paint being used. Hold the gun stationary about 10 inches from the test surface and pull the trigger just long enough to get a clear cut pattern.

1. If the pattern is **crescent shaped** as Type A, the trouble is caused by a dirty or damaged side port-hole. To clean the nozzle, soak in a solvent and clean with the brush that is provided. If the obstruction cannot be removed in this manner, a tooth pick or match stick may be used, **BUT DO NOT USE ANY METAL OBJECT IN CLEANING GUN OR NOZZLE**. Regardless of how much care is taken, the use of a metal object will make these highly machined parts unfit for further use.
2. If the pattern is **wedge shaped** or heavy at the top as Type B, the trouble is caused by dirt around the center hole or dirt on the inside seat of the air nozzle. Again, the nozzles should be cleaned by soaking and brushing with a solvent.
3. If a **split pattern, heavy on both ends**, is obtained in the test, such as Type C, the trouble is caused by gun adjustment. To correct, either decrease the fan by turning the side port key counter clockwise or increase the material pressure.
4. If a **heavy center pattern** is obtained, the trouble is caused by too low an air pressure. To correct, increase the air pressure or decrease the material pressure.

Improper Controls

If the gun is not adjusted properly for the material being sprayed, any one of the following finishes may result.

1. **"Orange peel"** or a rough cobblestone appearance of the finished job is caused by one or a group of the following:
 - a. Too low an air pressure.
 - b. Gun too close or too far from surface.
 - c. Material not thoroughly mixed.
 - d. Humidity or draft condition poor.
2. **"Sags and runs"** are caused by too much material being applied or the material being applied too thin. To correct, be sure the gun is held at right angles to the surface and be sure the strokes of the gun are rapid enough for the amount of material being sprayed. If the speed of the strokes cannot be increased, cut down on the material by cutting the pressure or by turning in the material control screw.
3. **"Misting"** is caused by too high an air pressure, or the gun held too far from the surface.

To correct the above troubles, it will be necessary for the operator to use the "trial and error method" and experiment until he can tell at a glance just what is out of adjustment or what is damaged that is causing the unsatisfactory appearance of the finish.

Abnormal Conditions: The equipment will operate under any abnormal condition provided that the material or paint is not affected. If in extreme cold the material viscosity becomes heavy it will be necessary to increase the material pressure, or if in extreme heat the material viscosity is light the material pressure should be decreased.

It is also well to remember that paint and most other material will not stick to wet surfaces. Therefore do not

attempt to spray in rain unless the object is under cover and dry.

LUBRICATION:

The only points requiring lubrication are the packings. These will at times, depending on the use and climate conditions, require a few drops of OE-10 oil (Oil, Engine, S.A.E.-10). The need for oil can be determined by the leaking of air or material by these packings. The location of the packings and the method used in oiling are described in the maintenance section.

PREPARING EQUIPMENT FOR STORAGE

If the equipment is not going to be used for a period of time over one month, the following procedure should be used to prepare it for storage so that it will not be damaged by rust and corrosion:

Gun: The gun should be thoroughly cleaned of all paint. Then put a few drops of oil in the air passage and material passage and blow air through the gun to distribute the oil.

Tank and Regulator: The tank should be cleaned of all paint inside and out, the cover put on and pulled up tight, and all cocks shut off.

Cup: Clean off all paint and screw cover and cup together.

Extension: Remove all paint and place a few drops of oil inside both tubes. Rub a film of oil on needle valve and pack in chest.

Hose: Remove all paint, grease, or oil that is on the hoses. Roll and pack in chest.

Tools: Coat with a film of oil and pack in chest.

If the equipment is to be shipped overseas or put in storage for over six months, a rust preventive oil should be used on all items with the exception of hose. Otherwise the same procedure as listed above may be used.

SECTION II

MAINTENANCE MANUAL

FOR

BINKS

SPRAYER ATTACHMENT,

PAINT, PNEUMATIC

MODEL E-1A

AND

MODEL E-1B



BINKS MANUFACTURING COMPANY

CHICAGO, ILLINOIS

MAINTENANCE

Binks Thor Model 7 Spray Gun

(Used on E-1A Outfit)

It may become necessary at some time to disassemble the gun because of wear or damage. If so, the following method should be used. See Figure 11.

Air Connection: To remove the air connection T-1033 first remove the set screw T-752 and then loosen and unscrew the connection.

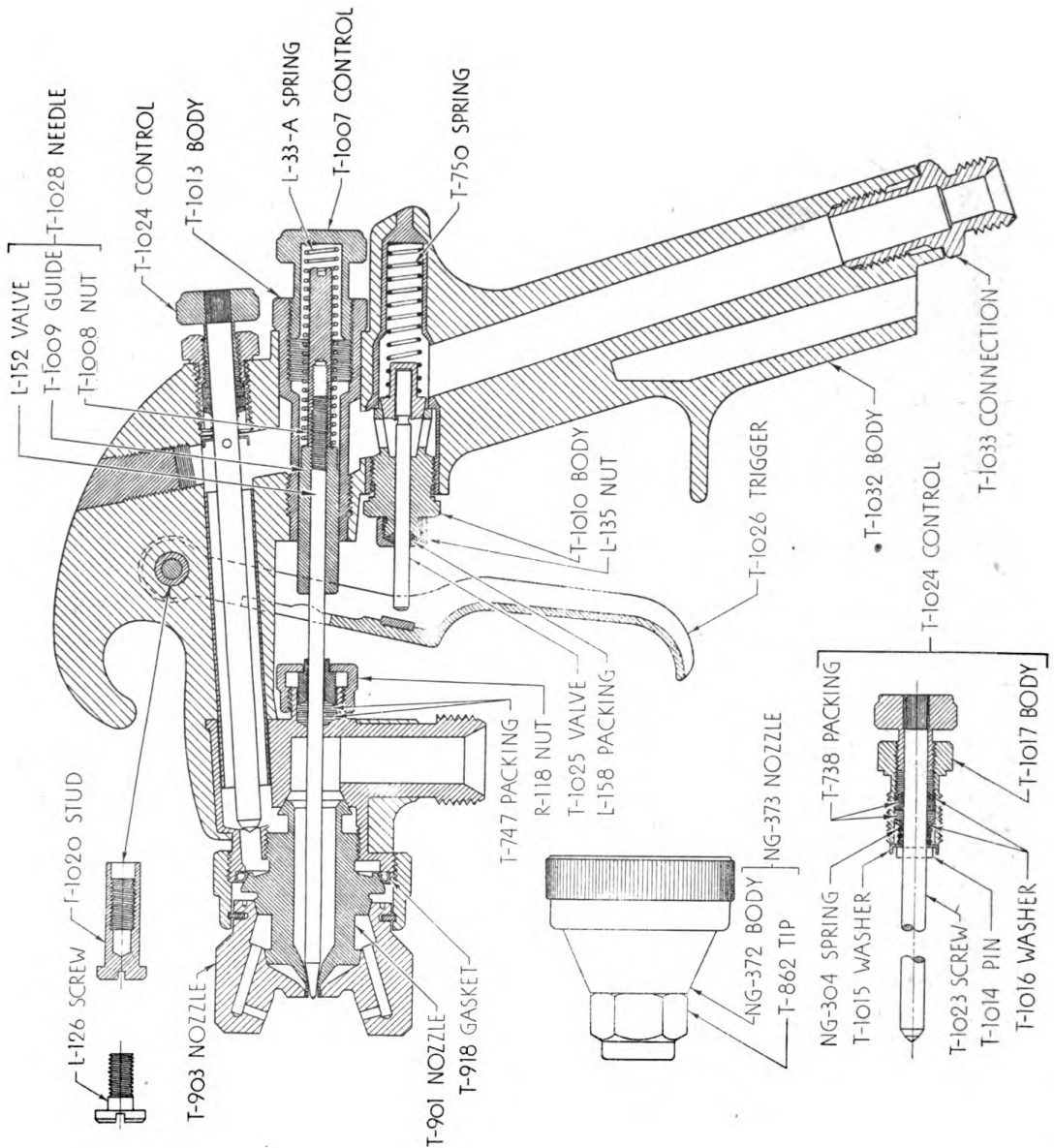
Trigger: To remove the trigger T-753, unscrew the trigger screw T-759 from the trigger stud T-760.

Air Valve: The complete air valve assembly can be removed by unscrewing. To replace the air valve packing T-747, unscrew T-748 nut. If packing is dry saturate with two drops of machine oil. Before reassembling, be sure the air valve stem assembly T-744 and the air valve body T-751 are clean, as any dirt which may lodge between them will cause the gun to leak. The gasket T-749 is of a copper asbestos construction and should last the life of the gun. It should not be removed unless damaged and replacement is necessary.

Material Control Assembly: The material control T-724 can be removed by simply unscrewing. To disassemble, insert the screw driver in the front, engage the slot in T-725, screw and unscrew. Be sure that when the end of the threads are reached, the tension in the spring does not cause the screw to become lost. When the screw is removed, the spring and ring can be dropped out of the control body T-726. Before reassembling, the spring should be packed with a vaseline or grease.

BINKS "THOR MODEL 17-A" SPRAY GUN (Used with E-1B Outfits)

FIGURE 13

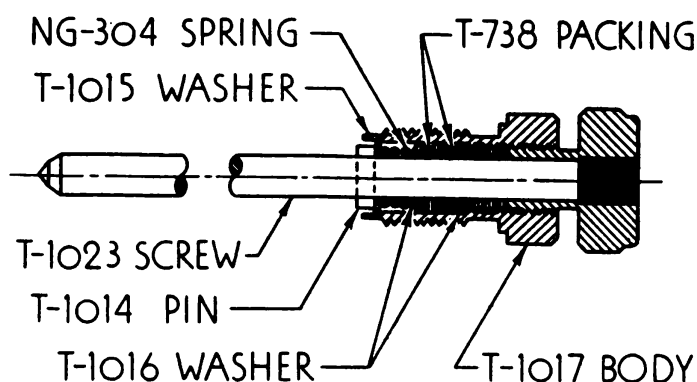


Needle Valve Packing: To replace the packings T-747, it is necessary to remove the needle valve T-1028. After this the nut R-118 can be unscrewed and the packing can be removed. Do not remove this packing unless it is to be replaced, as in most cases it is necessary to destroy the packing in order to get it out. In every day use the packing should be oiled. To oil, it is only necessary to unscrew the nut R-118 and slide it back on the needle so that the oil can be placed on the packing.

Air Nozzle: To remove the air nozzle T-903 or NG-373, the retainer ring should be unscrewed by hand. Never use any type of wrench on this ring or it will be damaged. If the nozzle is too tight to remove by hand, a strip of emery cloth wrapped around the ring will allow enough leverage so that it can be loosened. In cleaning and handling the nozzle, extreme care must be taken so it is not damaged. Never use any metal object in cleaning. If very dirty or plugged, a tooth pick, the brush, and a good soaking will clean the nozzle with no danger of damage.

Material Nozzle: The material nozzle T-901 can be removed by unscrewing. Care must be taken so that the wrench does not slip as the nozzle is finished to very close tolerances and any nicks will cause the spray to be faulty. In all normal cleaning the nozzle should not be removed, but should be cleaned while in the gun to hold the chances of damage to a minimum.

The gasket T-918 is constructed so that it should last the life of the gun and should not be removed unless it has been damaged and replacement is necessary.



SIDE PORT CONTROL 17-A GUN

FIGURE 14

Side Port Control: To remove the side port control assembly T-1024, unscrew the body T-1017 from the gun body. To disassemble the side port control, first screw the control screw T-1023 all the way into the body T-1017. Next press washer T-1015 toward body depressing spring NG-304, and remove pin T-1014. This will allow the washer T-1015 and the spring NG-304 to be removed. Then the control screw T-1023 can be unscrewed from the body T-1017 and the two washers T-1016 and the two packings T-738 pressed from the body. If the packings T-738 are dry, soak with a few drops of machine oil.

When reassembling the side port control assembly T-1024 into the gun, be sure that the control screw is turned as far out of the body as it will go. If this is not done the seat in the gun or the control screw will be damaged.

Material Control Body: To remove the material control body T-1013, it is only necessary to unscrew.

AIR CONTROL UNIT

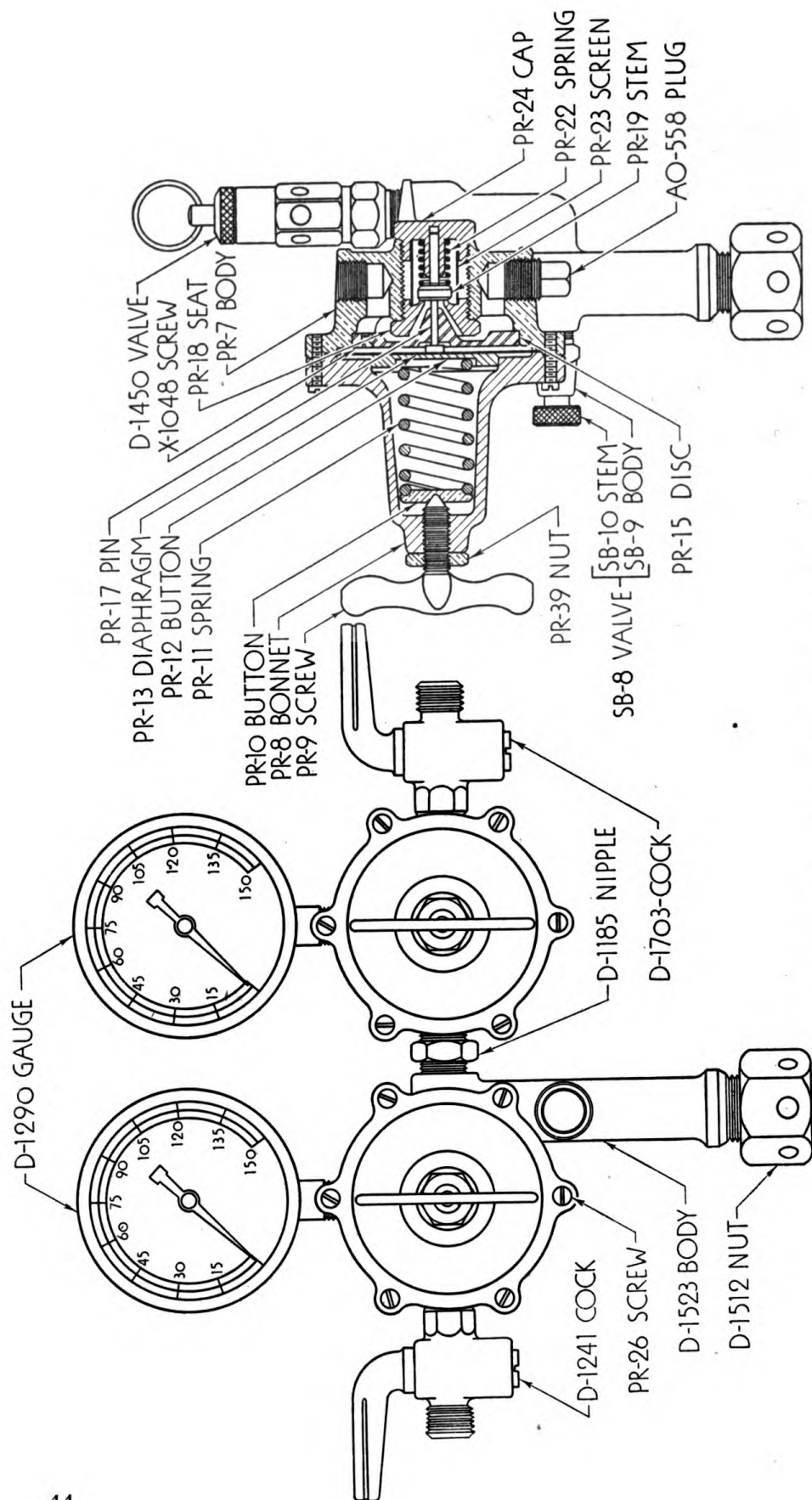
Regulator: The 82-U air control unit is removed from the tank by removing the nut D-1512. As the air control unit is composed of two regulators that are identical in construction, with the exception of the bodies, the troubles encountered and the steps in disassembling one unit only need be discussed.

The troubles encountered in a regulator and their identifying characteristics are as follows:

1. The most common trouble is caused by **dirty or damaged PR-19 stems**. A damaged or dirty stem in the regulator will cause the pressure of the regulated air to climb to the main line pressure when the gun is not in use. To correct, the seat must be removed (see procedure outlined in maintenance section) cleaned if dirty, and replaced if damaged. In some cases the trouble may be caused by the seat PR18. If the seat is nicked or pitted, it should be replaced; if dirty it should be cleaned.
2. Another cause of regulator trouble is a **broken diaphragm PR-13**. This will cause the pressure of the regulated air to drop way down when the trigger of the gun is pulled. Another indication of a broken diaphragm is the noise of air escaping in the regulator.
3. The third cause of trouble is the **screen PR-23**. If this screen is allowed to become filled with dirt, it will not allow enough air to pass. Consequently, the pressure of the regulated air will have a large drop when the gun is used.

Pop Valve

The pop valve D-1450 is an A.S.M.E. inspected safety valve and is sealed. It should never be disassembled except at the factory. If the pop valve fails to operate satisfactorily, it must be replaced. To remove the pop valve it is only necessary to unscrew.



BINKS MODEL 82-U AIR CONTROL UNIT

FIGURE 15

STEPS IN DISASSEMBLING REGULATOR

To disassemble the regulator, the following steps should be taken:

1. Loosen wing screw PR-9 until all tension is released.
2. Loosen and remove the six screws PR-26 and lift bonnet PR-8 from body. The two buttons PR-13 and PR-10 with the spring PR-11 can now be removed from bonnet.
3. Remove diaphragm.
4. Remove pin PR-17.
5. Unscrew the two screws X-1048 and remove disc PR-15.
6. Unscrew seat PR-18—this seat should not be removed unless damaged and replacement is necessary.
7. Unscrew cap PR-24 which will allow the screen PR-23, the spring PR-22, and the stem PR-19 to be removed from body.

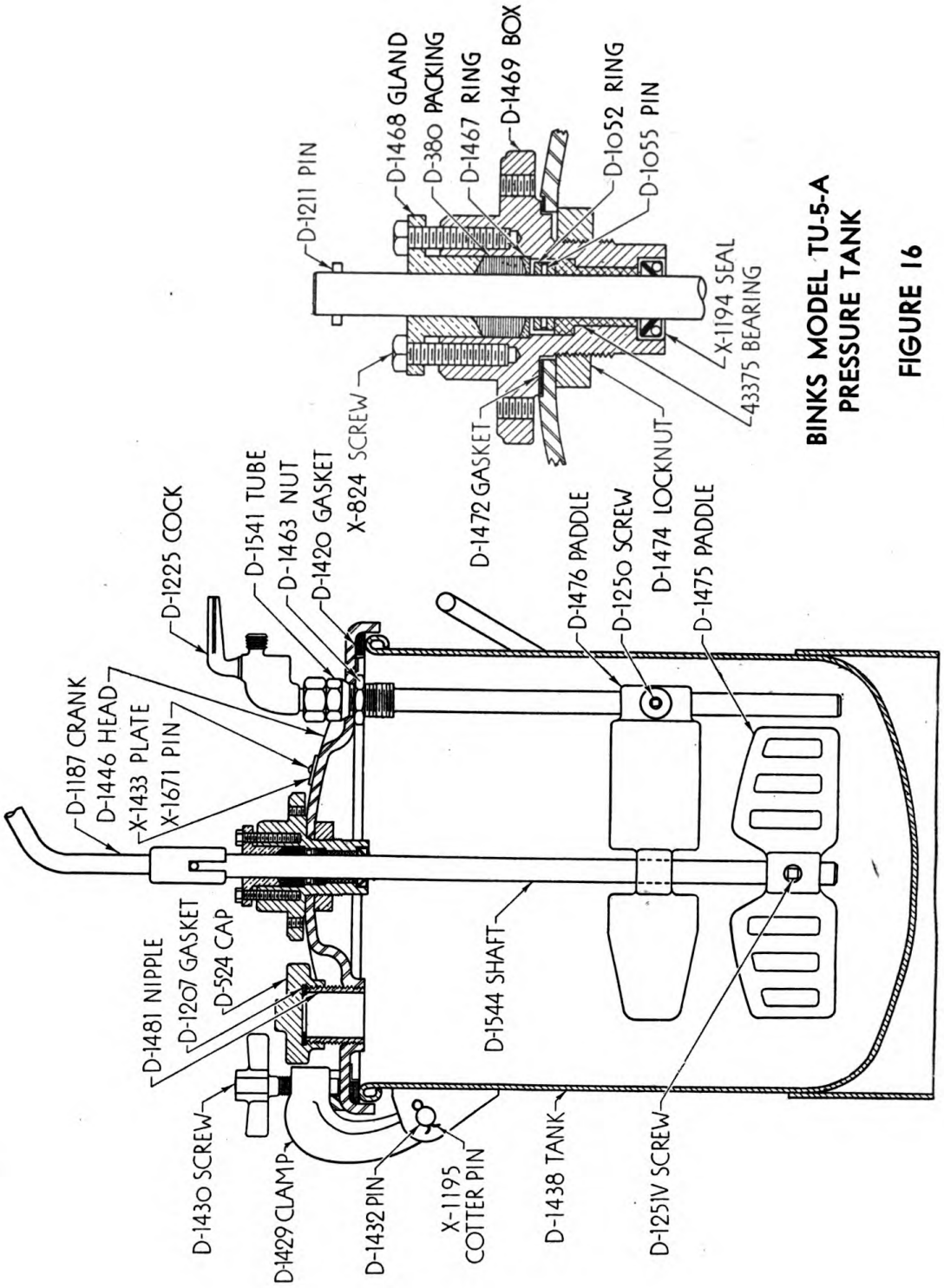
In reassembling the regulator, the following points should be checked.

1. Be sure the screen, stem, and seat are clean.
2. Be sure the offset for the diaphragm and the diaphragm itself are clean.
3. In replacing bonnet, the six screws should all be screwed up snug, and then tightened evenly all the way around.

Gauges

The gauges D-1290 are not repairable and if they should fail to operate, it will be necessary to install a new one. A spare gauge is carried in the repair parts box.

To remove the air pressure gauges, it is only necessary to unscrew. To remove the material pressure gauge, the pop valve D-1450 must first be removed before this gauge can be unscrewed.



**BINKS MODEL TU-5-A
PRESSURE TANK**

FIGURE 16

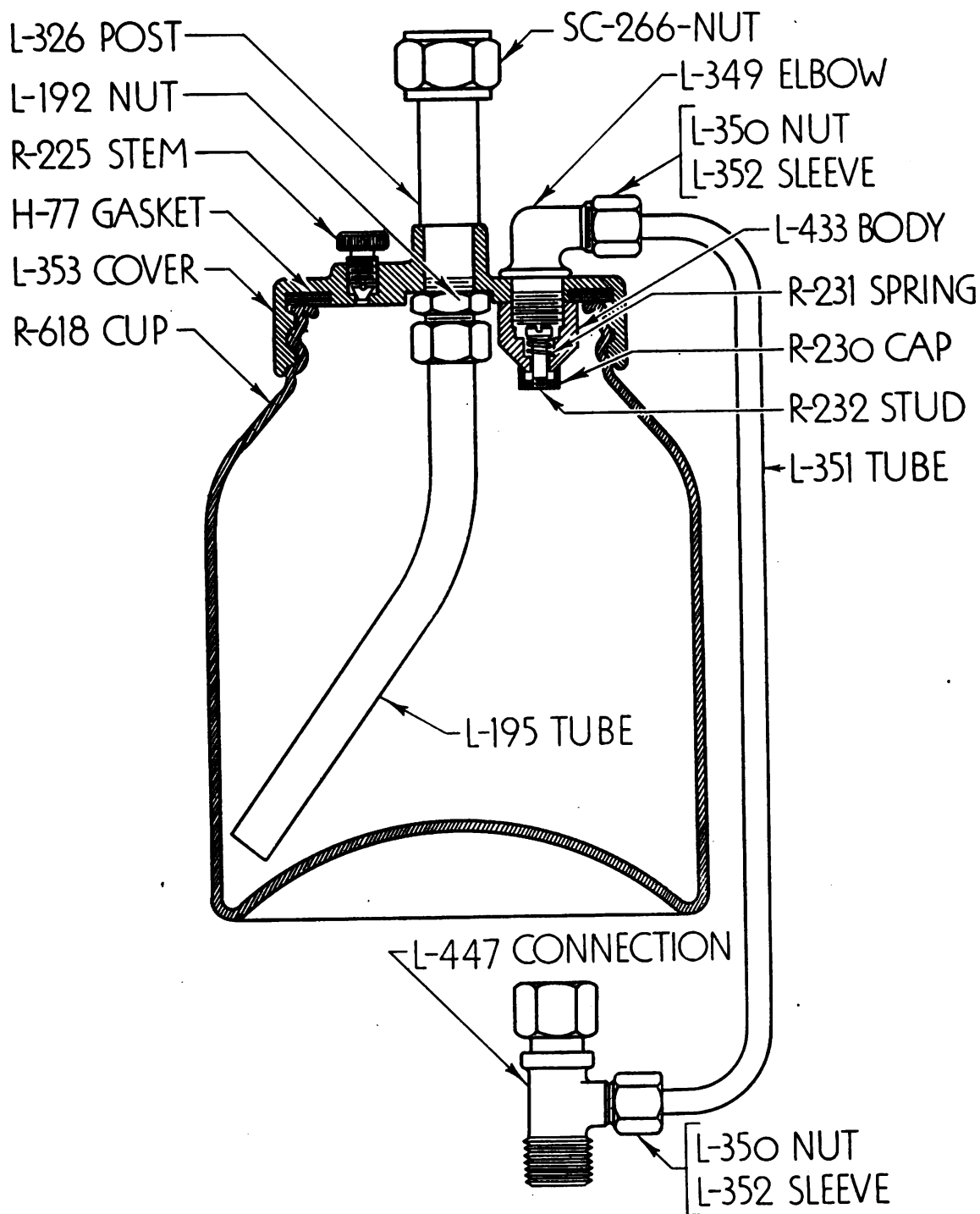
TANK

Gasket: The tank gasket D-1420 should not be removed until it no longer holds the air pressure in the tank. To replace the gasket when a new one is required, it is best to use a wooden block and drive the gasket in place, taking care that it is not stretched or the excess length will cause trouble when the last portion is pressed in.

Stuffing Box: To remove the stuffing box, it is first necessary to remove the paddles. To disassemble the paddles, loosen the set screws D-1251 and D-1250 and slide the paddles off of the shaft. Next unscrew locknut D-1474 (this nut has a left-hand thread) so stuffing box and shaft can be taken from head. The stuffing box can be disassembled by removing the two screws X-824 and pulling the shaft D-1544 up and out. The stuffing box is equipped with an oil impregnated bearing and an oil seal. The only time they should be removed is for replacement. To replace, drive out the old bearing and oil seal and press in the new parts.

When the stuffing box is disassembled, the string packing D-380 can be readily replaced, but it is not necessary to disassemble the unit to service the packing. If during regular service, the packing needs replacing or servicing, it can be done by removing the two screws X-824 and raising the packing gland D-1468. This will expose the packing so that it may be oiled with a few drops of machine oil or replaced. As the packing is used with a hand agitator, about the only service it will require is a periodical lubrication and tightening of the two bolts X-824.

Material Tube: The material tube D-1541 can be removed by unscrewing the nut D-1463. The cock D-1225 can be removed from the material tube by the swivel nut which is a part of the cock assembly. The cock should not be disassembled as the parts are individually fit, and consequently not interchangeable. If the cock is damaged, it must be completely replaced.



BINKS MODEL L-246-C PRESSURE CUP

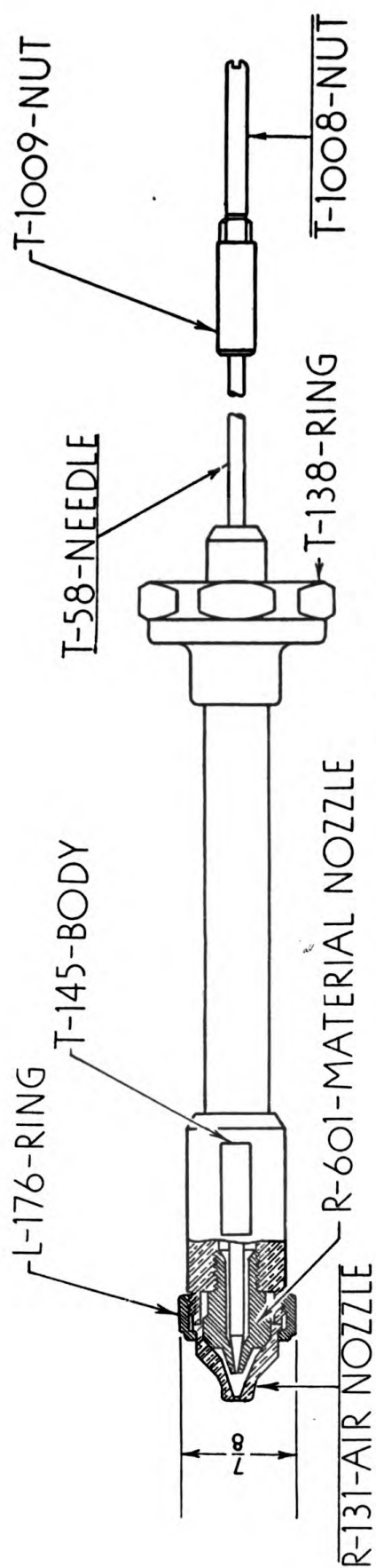
FIGURE 17

PRESSURE CUP

As the pressure cups used on the E-1A and E-1B outfits are identical, with the exception of the center post length, the maintenance of only the L-246-C cup will be explained. It can be seen in the parts list section that the L-246-C cup has a L-326 center post while the L-246-D cup has a L-444 center post.

To disassemble the cup, the following steps are necessary:

1. To remove the tube assembly L-195, unscrew the swivel nut and remove the tube and nut **together**. **Do not** attempt to disassemble these parts as they will be damaged and require replacement.
2. To remove the center post L-326, unscrew the nut L-192 and press the center post out of the cover.
3. To remove the elbow L-349, unscrew the body L-433 and press out of cover.
4. To disassemble the L-433 body, unscrew the stud R-232 from the cap R-230. When this is done the stud and spring R-231 can be taken from the body.
5. The gasket H-77 should not be removed unless damaged, as it is usually necessary to destroy it to remove it from the cover. A spare gasket is carried in the spare parts box.



BINKS MODEL 17 EAX-18 EXTENSION

FIGURE 18

EXTENSION

As the 7 EAX extension used in the Model E-1A and the 17 EAX extension used in the Model E-1B paint sprayer are identical in construction, with the exception of physical size, the 17 EAX only will be discussed in this section.

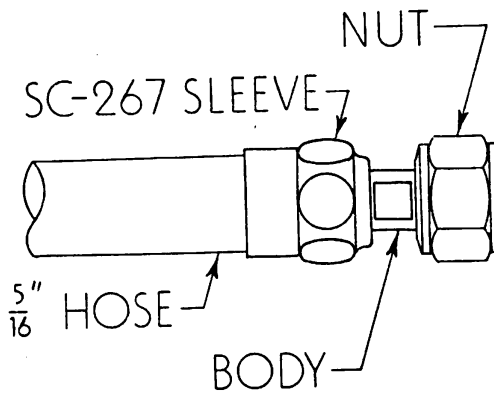
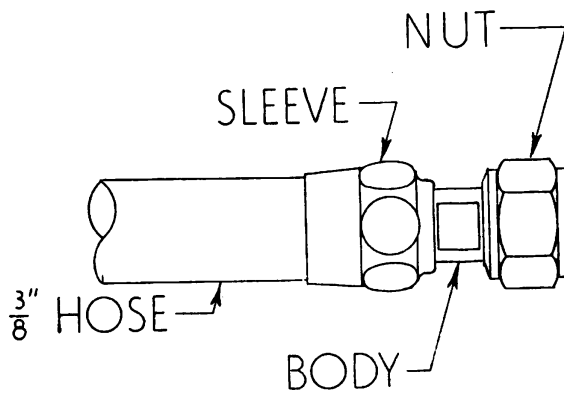
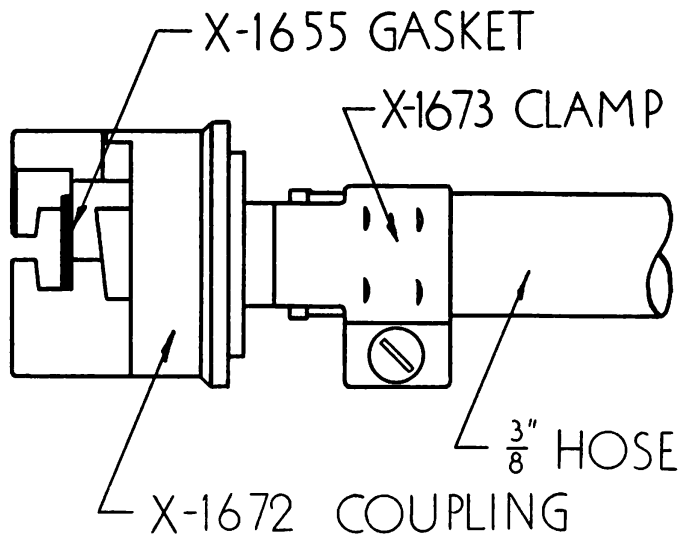
To remove nozzles, first remove the retainer ring L-176 by unscrewing. Then the air nozzle R-131 can be slipped from the material nozzle.

To remove the material nozzle R-601, unscrew. As these nozzles are delicate, care must be taken so they are not injured when being removed and cleaned.

At times it may be necessary to adjust the needle T-58 because of wear. To adjust needle, loosen the lock nut T-1008 and set the needle guide T-1009 to the new position and tighten lock nut. The position can be determined by having extension mounted to gun and placing needle in operating position; then pull gun trigger. The trigger plate should contact the air valve stem of the gun and still have $\frac{1}{32}$ to $\frac{1}{16}$ inch clearance between it and the needle valve.

HOSE COUPLINGS

FIGURE 19



Hose

The couplings supplied on all hose are of the removable type. The quick detachable type are removed by loosening the screw type clamp and pulling hose from tail piece.

If a hose is damaged near the coupling of a swivel nut type, the following procedure should be used to repair it so that the major portion of the hose can still be used:

1. Remove coupling from hose by unscrewing the body from the sleeve.
2. Cut damaged portion of hose off.
3. Clamp the sleeve in a vice, or if no vice is available it may be held with wrench.
4. Press the hose into the sleeve. Be sure that pressure is applied to hold the hose against the shoulder in the sleeve as operation 5 is being performed.
5. Dip the body part of the connection in water to lubricate (do not use oil as oil will rot the rubber of the hose); then screw it into the sleeve, using the flat surface of the body part of the connection to engage the wrench.

BINKS 2-A RESPIRATOR



DIRECTIONS

Wear the headbands below the ears as shown in illustration. See that they are properly adjusted so that the respirator fits the face snugly. Change filter when resistance to breathing becomes noticeable. To insert new filter, remove screw cap. Proper care of your Binks Victor Respirator will maintain its easy breathing quality, its comfort and its efficiency.

SECTION III

PARTS LIST

FOR

BINKS

SPRAYER ATTACHMENT,

PAINT, PNEUMATIC

MODEL E-1A

AND

MODEL E-1B



BINKS MANUFACTURING COMPANY

CHICAGO, ILLINOIS

PREPARATION OF REQUISITIONS

SAMPLE COPY FOR USE IN THE PREPARATION OF REQUISITIONS

State PERIOD designation by use of one of the following terms:

- (1) "INITIAL" - first requisition of authorized allowances.
- (2) "REPLENISHMENT" - subsequent requisitions to maintain authorized allowances.
- (3) "SPECIAL" - requisitions for necessary repairs not covered by allowances.

Emergency requisitions sent by telephone, telegraph, or radio must always be confirmed immediately with requisition marked: "Confirming (state identifying data)"

Prepare a separate requisition for each different machine. Type "SPARE PARTS" in upper right hand corner of requisition form.

WAR DEPARTMENT
Q. M. C. Form No. 400
Revised Apr. 8, 1931

(Sample)

SPARE PARTS

REQUISITION

To: Engineer Supply Officer, No. of Sheets 1 Sheet No. 1
Columbus Quartermaster Depot, Columbus, Ohio
Requisition No. E-581-5-43 Date August 14, 1942 Period Special
SHIP TO Engineer Property Officer, Pine Camp, New York
MARKED FOR: Engineer Supply Officer, 802nd Engr. Battalion, Pine Camp, N. Y.

Requisitioned By (show Signature, Rank, Organization, Destination. If different from "ship to" include address):

Robert E. Roe
Robert E. Roe,
Major, C.E.,
Engineer Property Officer.

APPROVED XX For the Commanding Officer:

John E. Doe
John E. Doe
Col., C.E.,
Executive Officer

Q. M. C. NO.	SYMBOLS, LETTERS, UNIT OR MAXIMUM	AUTHORIZED	ON HAND	DUE IN	REQUIRED	APPROVED
	→ PARTS FOR SPRAYER ATTACHMENT, PAINT, PNEUMATIC MODEL E-1A					
	Basis: Repair of Disabled Equipment					
	Delivery is requested by July 4, 1943					
	<u>BINKS MODEL 7 GUN</u>					
T-703	NOZZLE, Material 36SS	0	0	0	1	
T-722	WIPER, Cup	0	0	0	2	
	<u>BINKS 82U AIR CONTROL UNIT</u>					
PR-13	STEM	0	0	0	1	
PR-19	DIAPHRAGM	0	0	0	1	
D-1290	GAUGE, 150# Pressure	0	0	1	2	
	→ <u>D-1711 AIR LINE FILTER</u>					
D-1256-1	SCREEN	0	0	0	1	
D-1695	FILTER	0	0	0	1	
	<u>TOOLS</u>					
64729-1	WRENCH, Combination Gun and Coupling	0	0	0	1	

Give complete shipping instructions. Special instructions for packing, marking, routing, etc. should be given at the end of the requisition.

State proper nomenclature of machine, and make, model, serial number and registration number.

State basis or authority, and date delivery is required, immediately below description of machine.

State manufacturers' parts numbers and nomenclature descriptions accurately and completely. Do not use abbreviations.

Group parts required under group headings as shown in manufacturers' parts catalogs.

Double space between items.

Nonexpendable items such as tools must be accounted for when requisitioned by a unit that they have been placed on Report of Condition of Charges.

Original from UNIVERSITY OF CALIFORNIA

PREPARATION OF REQUISITIONS

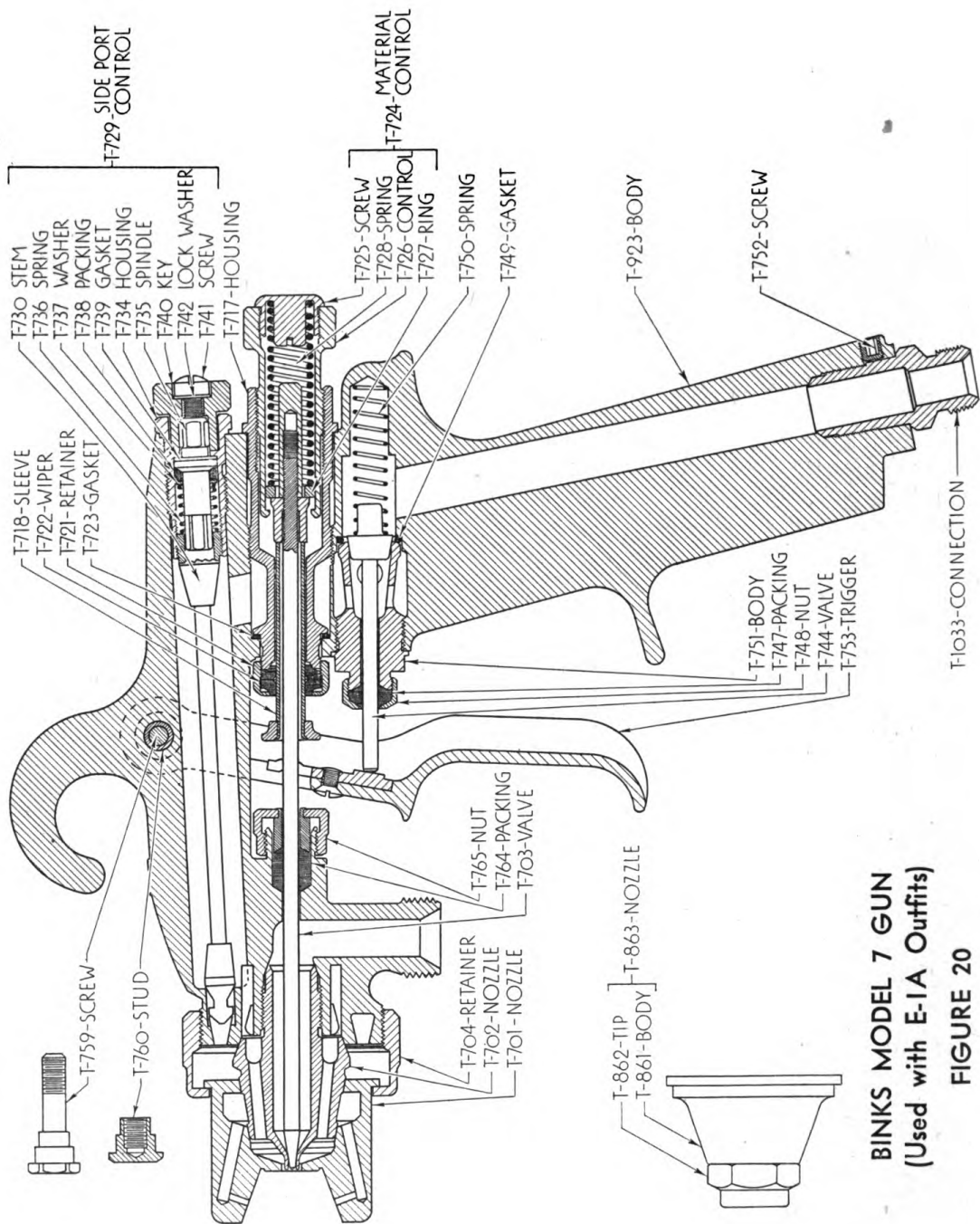
A Sample requisition in the correct form for submission by the Engineer Property Officer is shown on the opposite page.

THIS SHALL BE FOLLOWED IN MAKING OUT REQUISITIONS.

In order to eliminate duplication of work, Property Officers may authorize organizations to prepare requisitions in final form, leaving requisition number space blank for completion by Property Officer.

THE FOLLOWING RULES WILL BE OBSERVED CAREFULLY IN PREPARING REQUISITIONS FOR SPARE PARTS:

- a. Prepare a separate requisition for each different machine.
- b. Type "SPARE PARTS" in upper right hand corner of requisition form.
- c. State PERIOD designation by use of one of the following terms:
 - (1) "INITIAL" - first requisition of authorized allowances.
 - (2) "REPLENISHMENT" - subsequent requisitions to maintain authorized allowances.
 - (3) "SPECIAL" - requisitions for necessary repairs not covered by allowances.
- d. Give complete shipping instructions.
- e. State proper nomenclature of machine, and make, model, serial number and registration number.
- f. State basis or authority, and date delivery is required, immediately below description of machine.
- g. Group parts required under group headings as shown in manufacturers' parts catalogs.
- h. State manufacturers' parts numbers and nomenclature descriptions accurately and completely. Do not use abbreviations.
- i. Double space between items.
- j. Emergency requisitions sent by telephone, telegraph, or radio must always be confirmed immediately with requisition marked: "Confirming (state identifying data)".
- k. Nonexpendable items must be accounted for.



BINKS MODEL 7 GUN
(Used with E-1A Outfits)

FIGURE 20

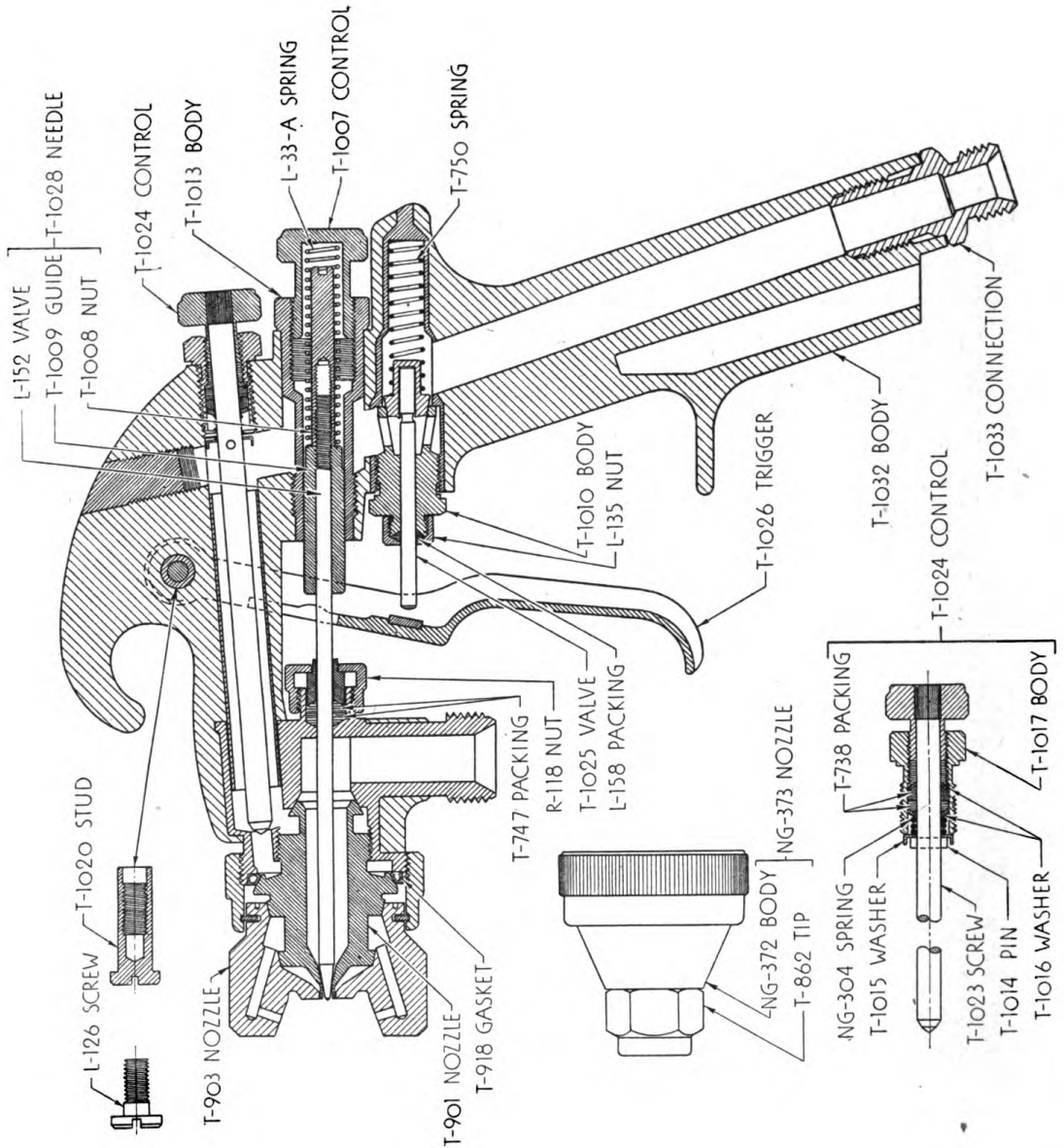
BINKS MODEL 7 GUN

(Used with E-1A Outfits)

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
T-701	Nozzle, Air—36P	1
T-702	Nozzle, Material—36SS	1
T-703	Valve, Material Needle Assembly—36SS	1
T-704	Retainer Ring	1
T-717	Housing, Material Control	1
T-718	Sleeve, Pusher, Assembly	1
T-721	Retainer, Material Control Wiper Cup	1
T-722	Wiper Cut	2
T-723	Gasket, Material Control	1
T-724	Control, Material, Assembly	1
T-725	Screw, Material Cont. Spring Retainer	1
T-726	Control Screw, Material	1
T-727	Ring, Material Control Spring	1
T-728	Spring, Material Control	1
T-729	Control, Side Port, Assembly	1
T-730	Stem, Side Port Control Assembly	1
T-734	Housing, Side Port Control	1
T-735	Spindle, Side Port Control	1
T-736	Spring, Side Port Control	1
T-737	Washer, Side Port Control	1
T-738	Packing, Side Port Control	1
T-739	Gasket, Side Port Control	1
T-740	Key, Side Port Control	1
T-741	Screw, Side Port Control Key	1
T-742	Washer, Side Port Control Lock	1
T-744	Valve, Air, Stem Assembly	1
T-747	Packing, Air Valve	1
T-748	Nut, Air Valve Packing	1
T-749	Gasket, Air Valve	1
T-750	Spring, Air Valve	1
T-751	Body, Air Valve	1
T-752	Screw, Air Connection	1
T-753	Trigger, Assembly	1
T-759	Screw, Trigger	1
T-760	Stud, Trigger	1
T-764	Packing, Material Needle	1
T-765	Nut, Needle Packing, Assembly	1
T-861	Body, Air Nozzle, Internal Mix	1
T-862	Tip, Air Nozzle, Internal Mix—703	1
T-863	Nozzle, Internal Mix, Assembly—703	1
T-923	Body, Gun Assembly	1
T-1033	Connection, Air	1

BINKS "THOR MODEL 17-A" SPRAY GUN (Used with E-1B Outfits)

FIGURE 21

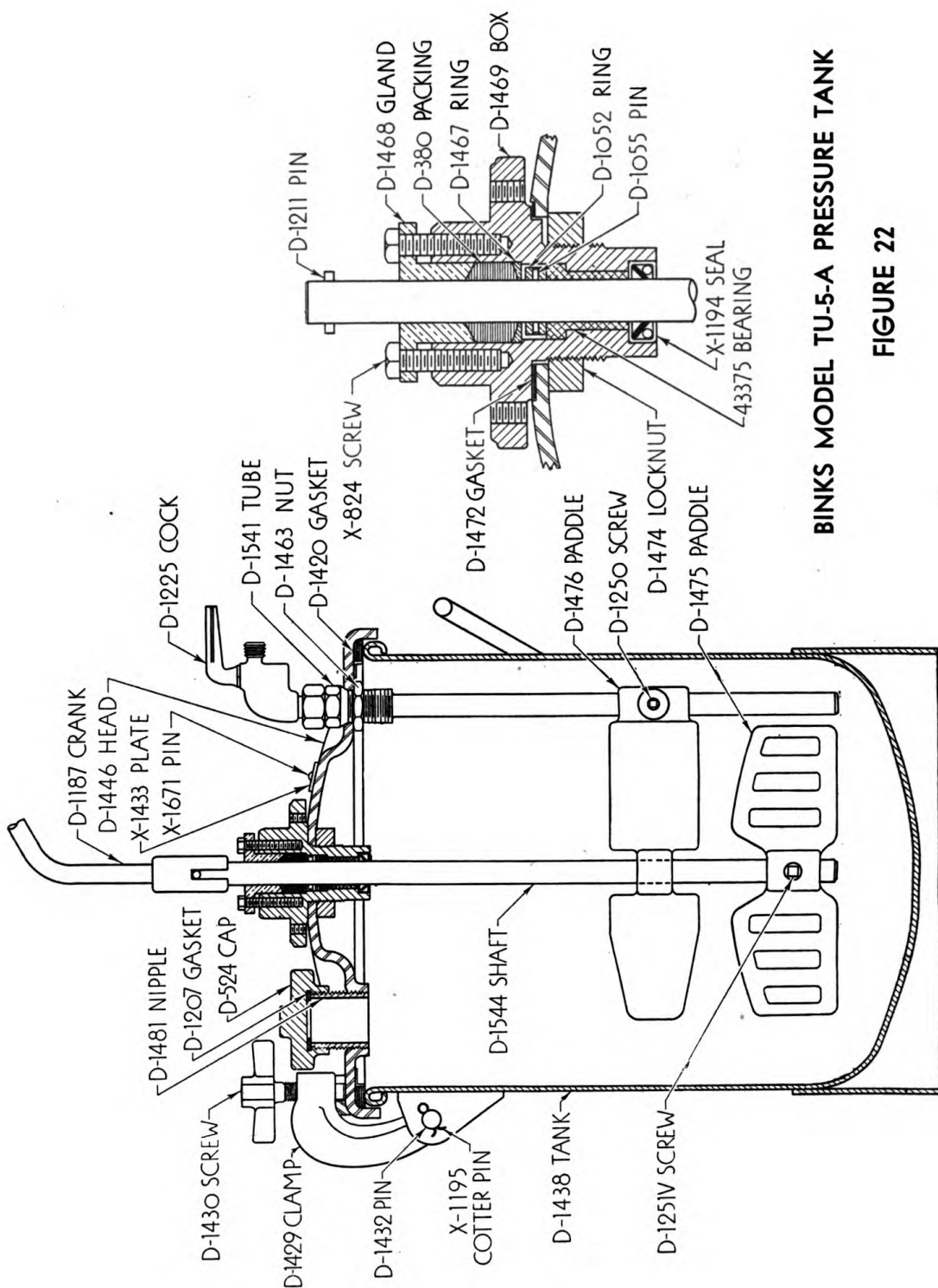


THOR MODEL 17-A GUN

(Used with E-1B Outfits)

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
L-33-A	Spring, Material	1
L-126	Screw, Trigger	1
L-135	Nut, Air Valve Packing	1
L-152	Stem, Needle Valve	1
L-158	Packing, Air Valve	1
NG-304	Spring, Side Port Control	1
NG-372	Body, Air Nozzle, Internal Mix	1
NG-373	Nozzle, Internal Mix Assembly—703	1
R-118	Nut, Needle Valve Packing, Assembly	1
T-738	Packing, Side Port Control	2
T-747	Packing, Needle Valve	3
T-750	Spring, Air Valve	1
T-861 *	Tip, Air Nozzle, Internal Mix—703	1
T-901	Nozzle, Material—66SS	1
T-903	Nozzle, Air, Assembly—63P	1
T-918	Gasket, Material Nozzle	1
T-1007	Screw, Material Control	1
T-1008	Nut, Needle Lock	1
T-1009	Guide, Needle	1
T-1010	Body, Air Valve	1
T-1013	Body, Material Control	1
T-1014	Pin, Side Port Control	1
T-1015	Washer, Side Port Control	1
T-1016	Washer, Packing	2
T-1017	Body, Side Port Control	1
T-1020	Stud, Trigger	1
T-1023	Screw, Side Port Control	1
T-1024	Control, Side Port, Assembly	1
T-1025	Stem, Air Valve, Assembly	1
T-1026	Trigger	1
T-1028	Needle Complete—15SS	1
T-1032	Body	1
T-1033	Connection, Air	1

* This number should be T-862

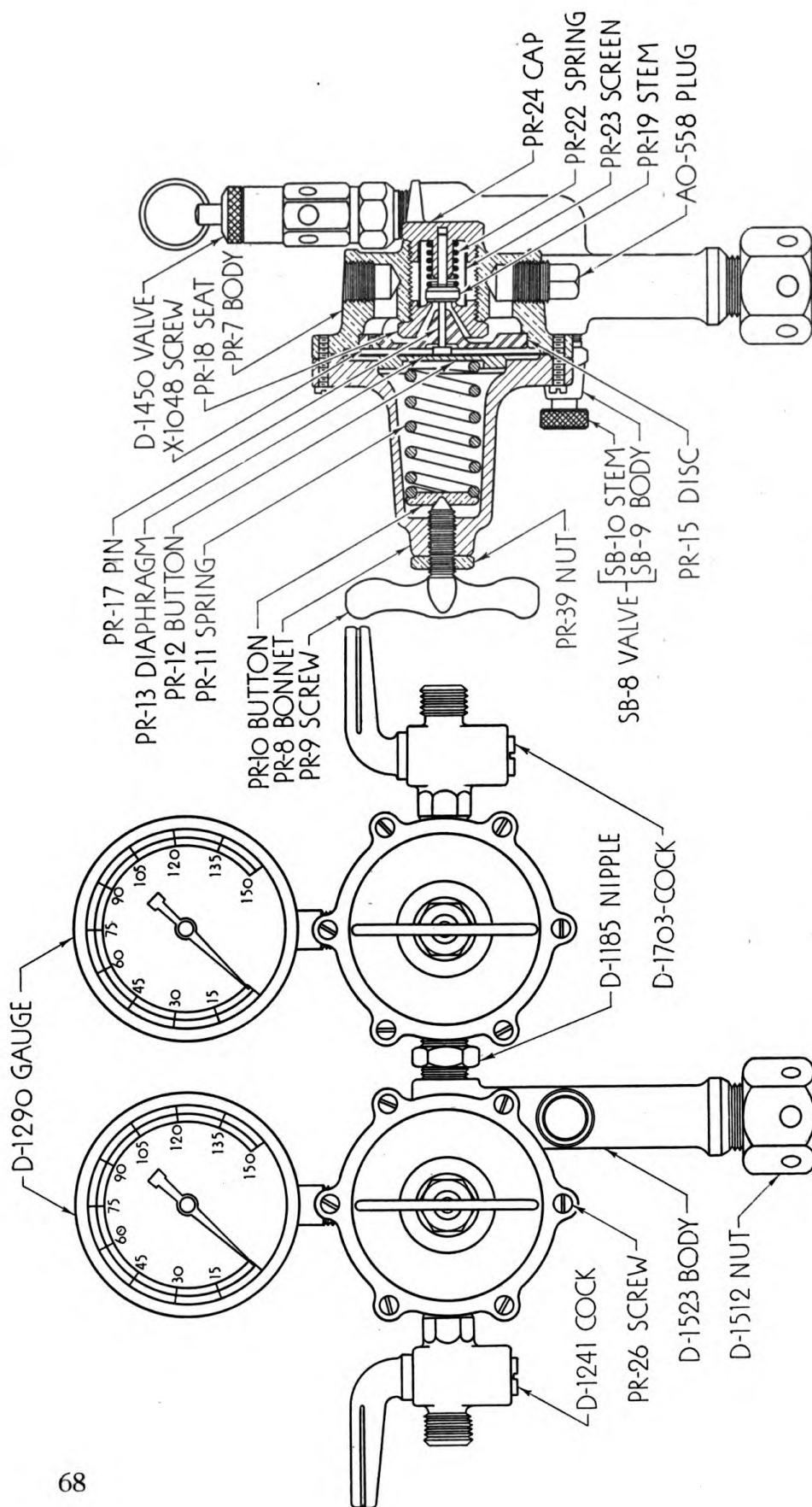


BINKS MODEL TU-5-A PRESSURE TANK

FIGURE 22

TU-5-A PRESSURE TANK

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
D-380	Packing	1
D-524	Cap, Filler	1
D-1052	Ring, Shaft Support	1
D-1055	Pin, Supporting	1
D-1187	Crank	1
D-1207	Gasket, Filler Cap	1
D-1211	Pin, Crank Drive	1
D-1225	Cock, Material Assembly	1
D-1250	Screw, Set	1
D-1251	Screw, Set	1
D-1420	Gasket, Head	1
D-1429	Clamp, "C"	6
D-1430	Screw, Clamp	6
D-1432	Pin, "C" Clamp	6
D-1438	Tank Shell	1
D-1446	Head, Tank	1
D-1463	Nut, Material Outlet	1
D-1467	Ring, Packing	1
D-1468	Gland, Packing	1
D-1469	Box, Stuffing	1
D-1472	Gasket, Stuffing Box	1
D-1474	Locknut, Stuffing Box	1
D-1475	Paddle	1
D-1476	Paddle, Stationary	1
D-1481	Nipple, Filler	1
D-1541	Tube, Material	1
D-1544	Shaft, Agitator, Assembly	1
X-824	Screw, Packing Gland	2
X-1194	Seal, Oil	1
X-1195	Pin, Cotter	6
X-1433	Plate, Serial Name	1
X-1671	Pin, Drive	2
43375	Bearing, Stuffing Box	1

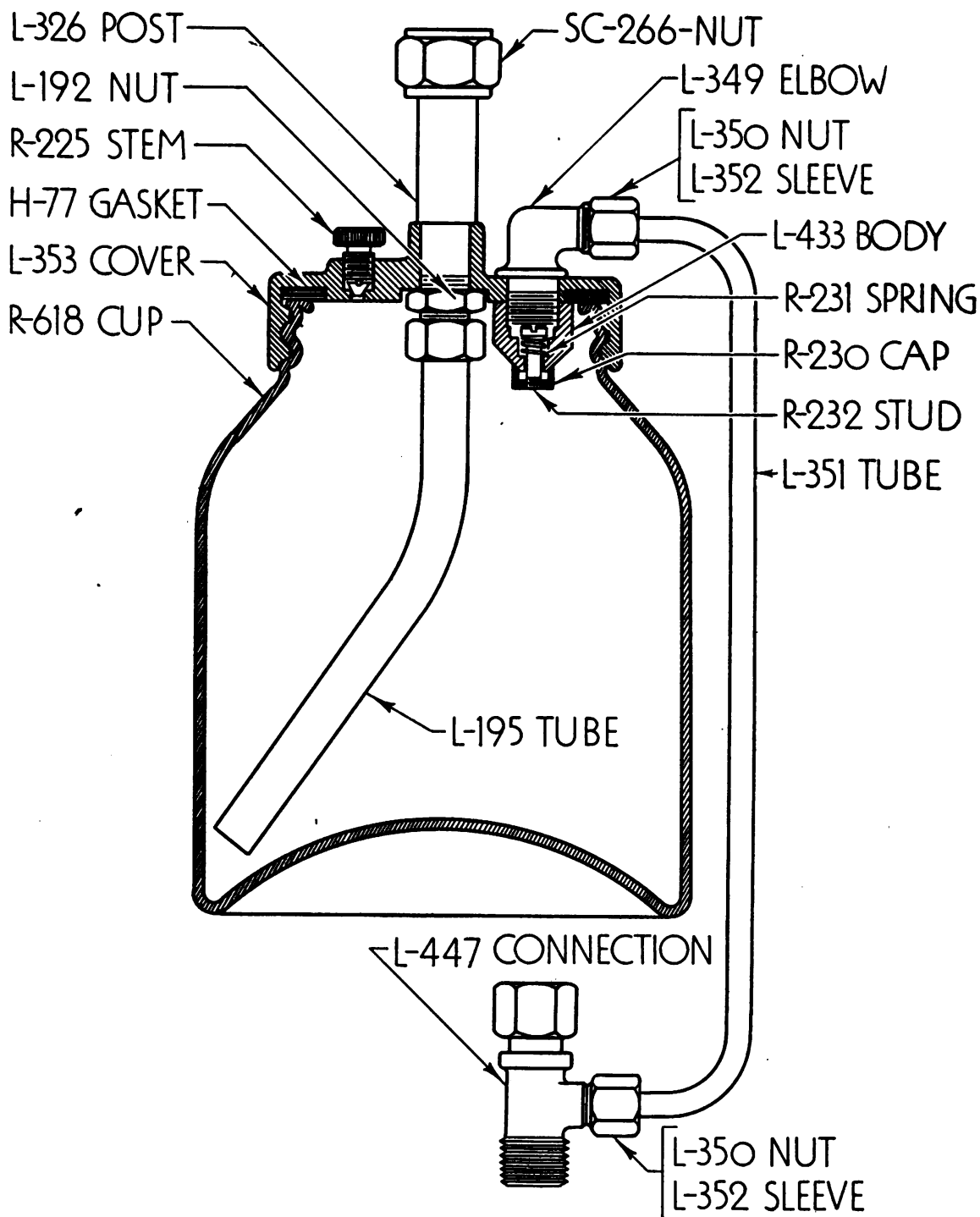


BINKS MODEL 82-U AIR CONTROL UNIT

FIGURE 23

82-U AIR CONTROL UNIT

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
PR-7	Body	1
PR-8	Bonnet	2
PR-9	Screw, Wing	2
PR-10	Button, Spring	2
PR-11	Spring, Diaphragm	2
PR-12	Button, Diaphragm	2
PR-13	Diaphragm	2
PR-15	Disc	2
PR-17	Pin, Push	2
PR-18	Seat	2
PR-19	Stem	2
PR-22	Spring, Valve	2
PR-23	Screen	2
PR-24	Cap	2
PR-26	Screw, Bonnet	12
PR-39	Nut, Lock	2
D-1185	Nipple, $\frac{3}{8}$ D.M.	1
D-1241	Cock, $\frac{3}{8}$ D.M.	1
D-1290	Gauge, 150# Pressure	2
D-1450	Valve, A.S.M.E. Safety	1
D-1512	Nut	1
D-1523	Body, Regulator	1
D-1703	Cock	1
AO-558	Plug	1
SB-8	Valve, $\frac{1}{8}$ Release, Assembly	1
SB-9	Body, $\frac{1}{8}$ Release Valve	1
SB-10	Stem, $\frac{1}{8}$ Release Valve	1
X-1048	Screw, Disc	4



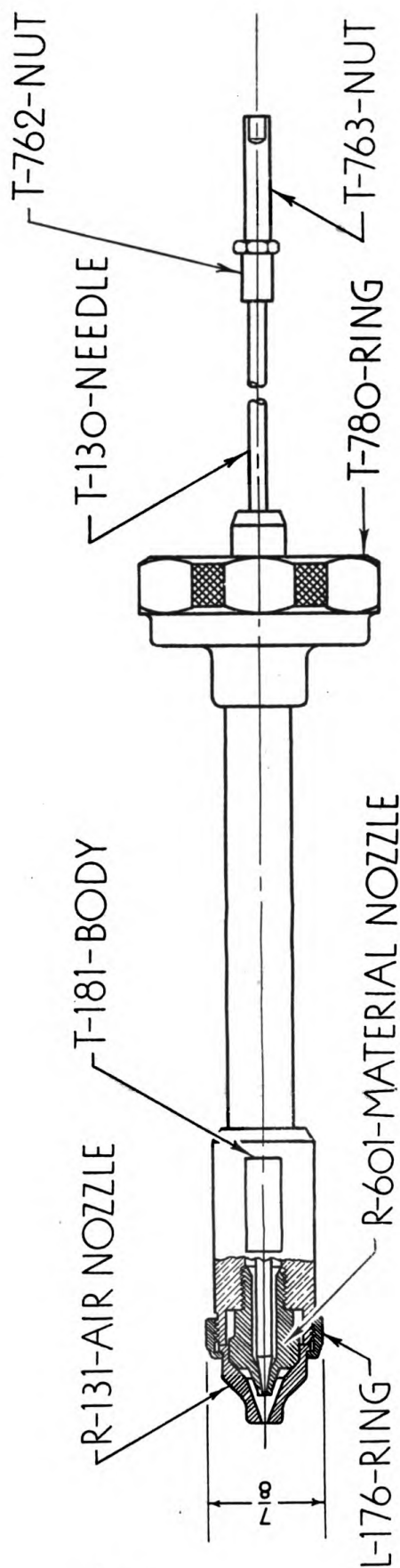
BINKS MODEL L-246-C PRESSURE CUP
 (Use with E-1A Outfits)

FIGURE 24

L-246-C PRESSURE CUP

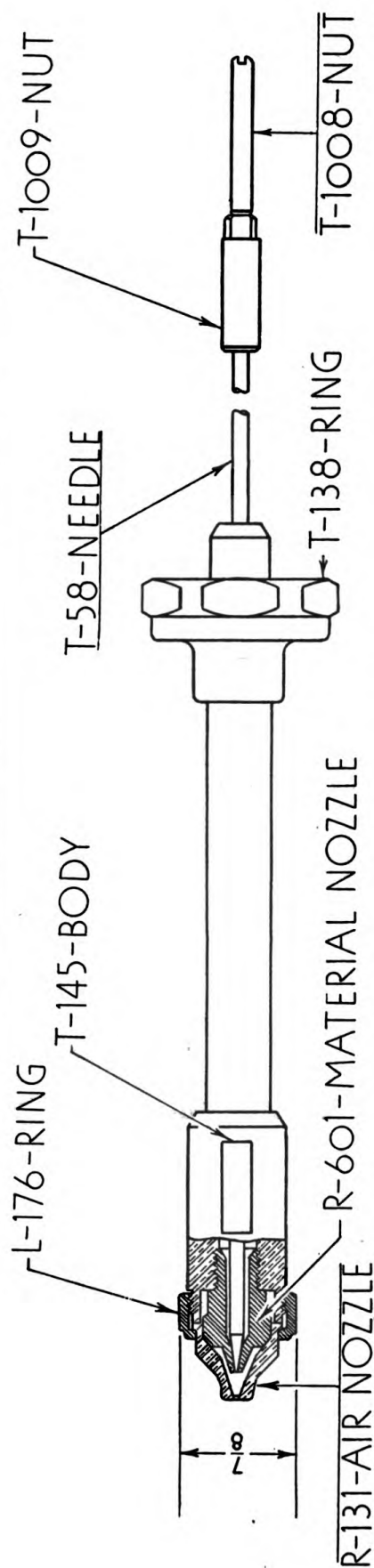
(Used with E-1A Outfits)

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
H-77	Gasket, Cup	1
L-192	Nut, Center Post	1
L-195	Tube, Material Assembly	1
L-326	Post, Center	1
L-349	Elbow, Air Connection	1
L-350	Nut, Swivel	2
L-351	Tube, Air	1
L-352	Sleeve	2
L-353	Cover	1
L-433	Body, Inlet Valve	1
L-447	Connection, Air	1
R-225	Stem, Release Valve	1
R-230	Cap, Inlet Valve	1
R-231	Spring, Inlet Valve	1
R-232	Stud, Inlet Valve	1
R-618	Cup	1
SC-266	Nut, Swivel	1



BINKS MODEL 7-EAX 18 EXTENSION
(Use with E-1A Outfits)

FIGURE 26



BINKS MODEL 17-EAX 18 EXTENSION
(Use with Model E-1B Outfits)

FIGURE 27

7 EAX-18 EXTENSION

(Used with E-1A Outfits)

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
L-176	Ring, Retainer	1
R-131	Nozzle, Air—R-3	1
R-601	Nozzle, Material—JA	1
T-130	Needle, Valve	1
T-181	Body	1
T-762	Nut, Front Lock	1
T-763	Nut, Rear Lock	1
T-780	Ring, Retainer	1

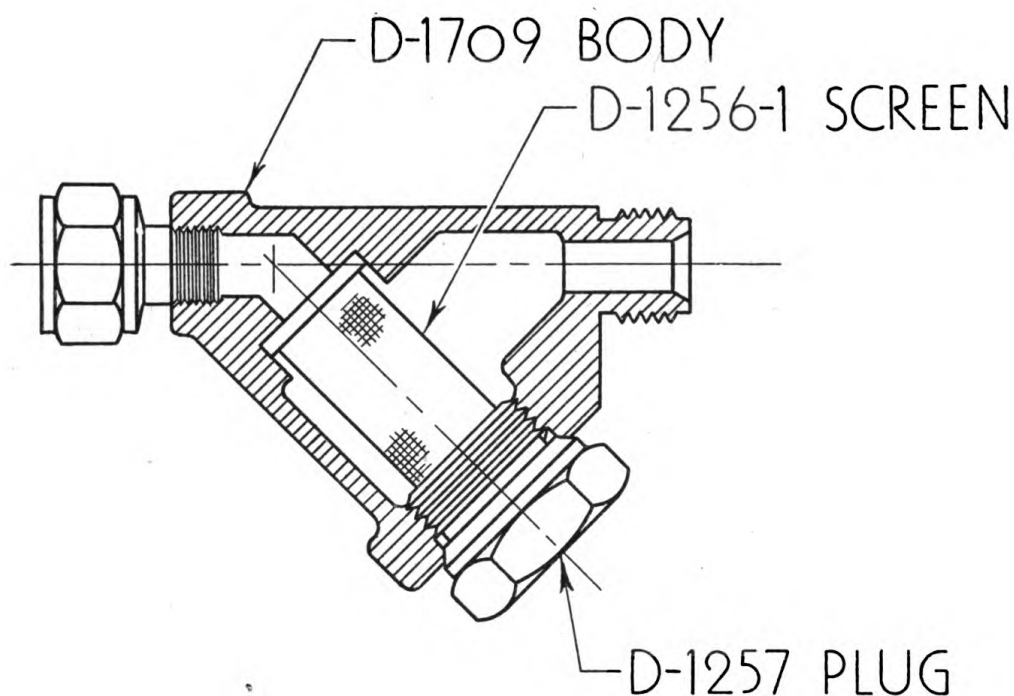
17 EAX-18 EXTENSION

(Used with E-1B Outfits)

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
L-176	Ring, Retainer	1
R-131	Nozzle, Air R-3	1
R-601	Nozzle, Material JA	1
T-58	Needle, Valve	1
T-138	Ring, Retainer	1
T-145	Body	1
T-1008	Nut, Needle Lock	1
T-1009	Guide, Needle	1

D-1710 MATERIAL LINE STRAINER

FIGURE 28

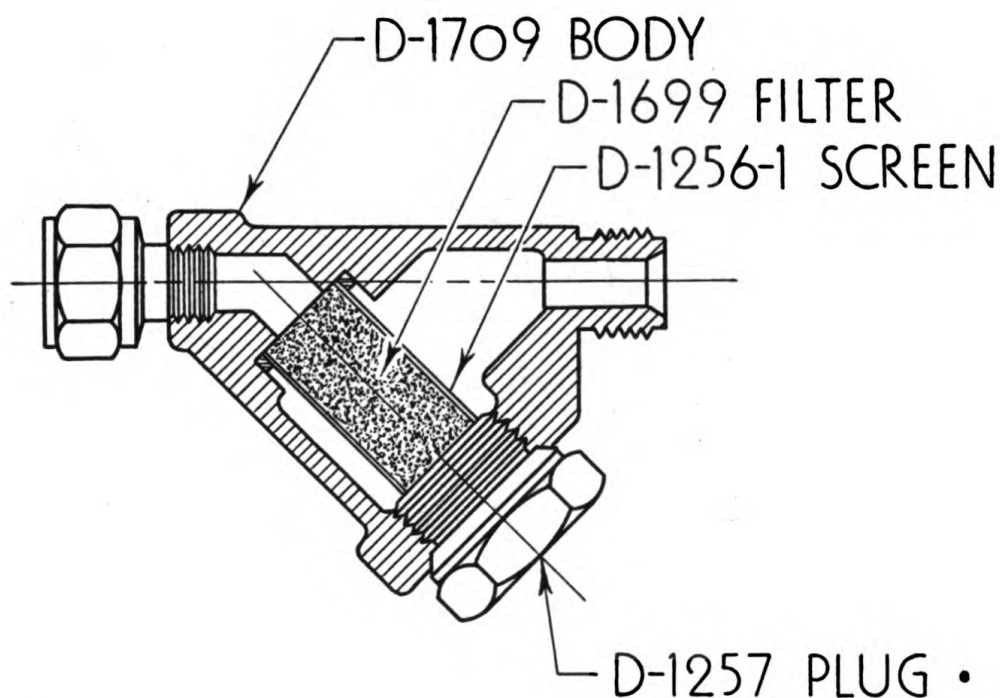


D-1710 MATERIAL LINE STRAINER

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
D-1256-1	Screen	1
D-1257	Plug	1
D-1709	Body	1
D-1711	Strainer, Material Line Complete	1

D-1711 AIR LINE FILTER

FIGURE 29

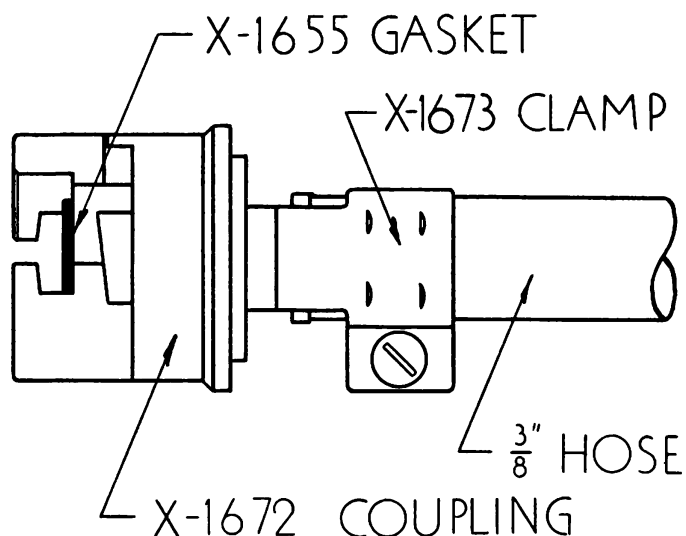


D-1711 AIR LINE FILTER

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
D-1256-1	Screen	1
D-1257	Plug	1
D-1699	Filter, Felt	1
D-1709	Body	1
D-1711	Filter, Air Line Complete	1

QUICK DETACHABLE HOSE COUPLING

FIGURE 30

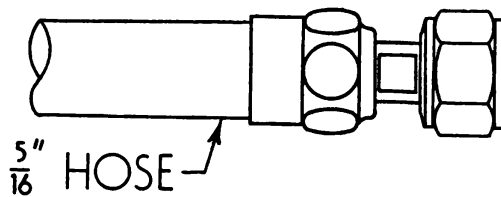


HOSE CONNECTIONS QUICK DETACHABLE COUPLING

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
X-1655	Gasket, Coupling	2
X-1672	Coupling, Hose End Only	2
X-1673	Clamp, Hose	2

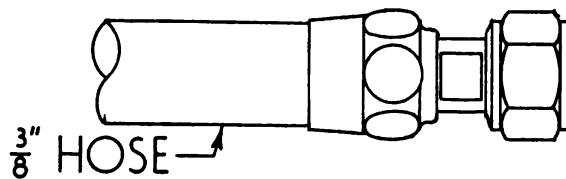
SC-264 HOSE COUPLING

FIGURE 31



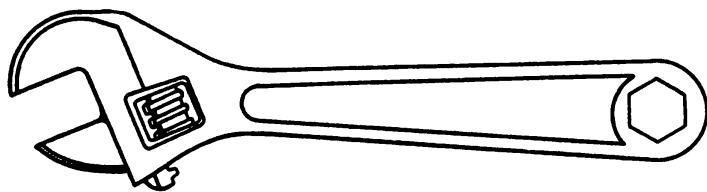
SC-265 HOSE COUPLING

FIGURE 32

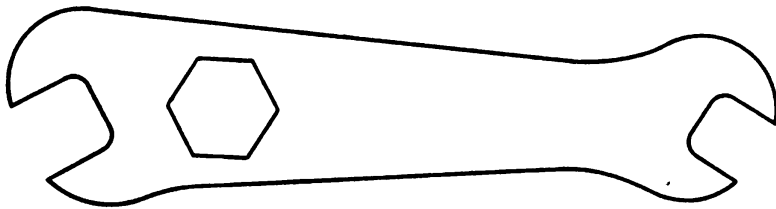


Hose Connections

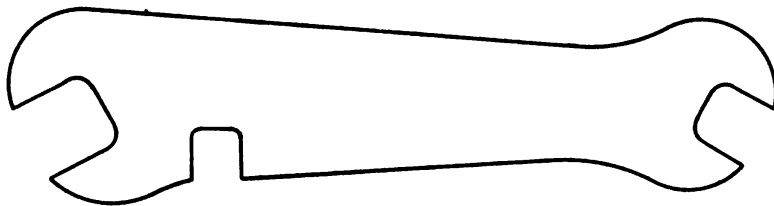
<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
SC-264	Connection, Hose, Complete	2
SC-265	Connection, Hose, Complete	4
44104	Hose, $\frac{3}{8}$ Air, 50 feet long, with Couplings	2
44105	Hose, $\frac{5}{16}$ Air, 30 feet long, with Couplings	1
44106	Hose, $\frac{3}{8}$ Material, 30 feet long, with Coup.	1



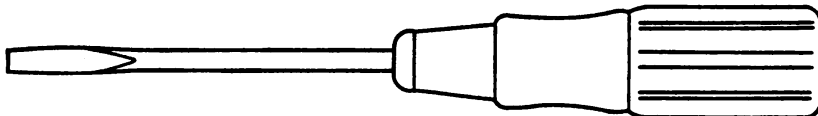
X-1651 ADJUSTABLE WRENCH



64729-1 WRENCH



64729-3 WRENCH



X-1674 SCREW DRIVER



L-221 BRUSH

FIGURE 33

TOOLS

<i>Part No.</i>	<i>Description</i>	<i>Quantity</i>
L-221	Cleaning Brush	1
X-1651	Wrench, 8" Adjustable	1
X-1674	Screw Driver	1
64729-1	Wrench, Combination Gun and Coupling (Used with E-1A Outfits)	1
64729-3	Wrench, Combination Gun and Coupling (Used with E-1B Outfits)	1

PARTS PRICE LIST

Part numbers are listed alphabetical then numerically, with weights, quantity, price and page.

Part No.	Description	Weight		Qu.	Price Each	Page No.
		Lbs.	Oz.			
2A	Respirator		5	1	2.50	54
2A-1	Filter, Respirator (100 in Box)		4½	1	1.75	54
AO-558	Plug, ¼" Tapered Pipe		½	1	.10	69
D-380	Packing		⅛	1	.20	67
D-524	Cap, Filler		6⅞	1	1.15	67
D-1052	Ring, Shaft Support		½	1	.15	67
D-1055	Pin, Supporting		⅛	1	.10	67
D-1185	Nipple, ⅜ Double Male		1½	1	.50	69
D-1187	Crank	1	2	1	1.50	67
D-1207	Gasket, Filler Cap		⅛	1	.20	67
D-1211	Pin, Crank Drive		⅛	1	.10	67
D-1225	Cock, Material Assembly		10⅜	1	1.45	67
D-1241	Cock, ⅜ Double Male		6¾	1	.90	69
D-1250	Screw, Set, ⅞x⅝" Square Head Cup Point		½	1	.10	67
D-1251	Screw, Set, ½x1" Square Head Cup Point		⅝	1	.10	67
D-1256-1	Screen, Filter		⅛	2	.15	76-77
D-1257	Plug, Filter		2⅜	2	.25	76-77
D-1290	Gauge, 150 Pound		9¼	2	1.75	69
D-1420	Gasket, Head		5½	1	1.75	67
D-1429	Clamp, "C"		13	6	.90	67
D-1430	Screw, Clamp		5	6	.65	67
D-1432	Pin, "C" Clamp		1⅜	6	.30	67
D-1438	Tank Shell	37		1	24.15	67
D-1446	Head, Tank	12	8	1	9.20	67
D-1450	Valve, A.S.M.E. Safety		5¾	1	4.05	69
D-1463	Nut, Material Outlet		¾	1	.55	67
D-1467	Ring, Packing		⅜	1	.30	67
D-1468	Gland, Packing		3¼	1	1.15	67
D-1469	Box, Stuffing	1	11½	1	5.20	67
D-1472	Gasket, Stuffing Box		⅛	1	.10	67
D-1474	Locknut, Stuffing Box		3⅜	1	.80	67
D-1475	Paddle		4⅞	1	1.75	67
D-1476	Paddle, Stationary	1	8⅞	1	2.90	67
D-1481	Nipple, Filler		5⅛	1	1.15	67
D-1512	Nut, Regulator		3¾	1	.75	69

PARTS PRICE LIST—Cont.

Part No.	Description	Weight		Qu.	Price Each	Page No.
		Lbs.	Oz.			
D-1523	Body, Regulator	2	3	1	7.35	69
D-1541	Tube, Material, Assembly		12 $\frac{7}{8}$	1	2.05	67
D-1544	Shaft, Agitator, Assembly (Includes D-1052, D-1055, D-1211, D-1542)	2	3	1	2.05	67
D-1699	Filter, Felt		*	1	.15	77
D-1703	Cock, $\frac{5}{8}$ -18x $\frac{1}{4}$ Pipe Thread		6 $\frac{3}{4}$	1	.90	69
D-1709	Body, Strainer		9	2	2.50	76-77
D-1710	Strainer, Material Line		11 $\frac{1}{2}$	1	2.90	76
D-1711	Filter, Air Line		11 $\frac{1}{2}$	1	3.05	77
H-77	Gasket, Cup		$\frac{3}{8}$	1	.20	71-73
L-33-A	Spring, Material		$\frac{1}{8}$	1	.25	65
L-126	Screw, Trigger		*	1	.35	65
L-135	Nut, Air Valve Packing		$\frac{1}{8}$	1	.40	65
L-152	Stem, Needle Valve #15SS		$\frac{1}{4}$	1	.60	65
L-158	Packing, Air Valve		*	1	.10	65
L-176	Ring, Retainer		$\frac{1}{8}$	1	.70	75
L-192	Nut, Center Post		$\frac{1}{8}$	1	.20	71-73
L-195	Tube, Material, Assembly	1		1	.50	71-73
L-221	Brush, Cleaning		$\frac{3}{8}$	1	.10	80
L-326	Post, Center		1 $\frac{1}{8}$	1	.50	71
L-349	Elbow, Air Connection		$\frac{3}{4}$	1	.90	71-73
L-350	Nut, Swivel		$\frac{1}{4}$	2	.20	71-73
L-351	Tube, Air		$\frac{5}{8}$	1	.60	71-73
L-352	Sleeve, Air Tube		*	2	.10	71-73
L-353	Cover, Cup		10 $\frac{1}{4}$	1	1.75	71-73
L-433	Body, Inlet Valve		$\frac{3}{8}$	1	.25	71-73
L-444	Post, Center		1 $\frac{1}{8}$	1	.50	72
L-447	Connection, Air		1 $\frac{3}{8}$	1	1.10	71-73
NG-304	Spring, Side Port Control		*	1	.20	65
NG-372	Body, Air Nozzle, Internal Mix		2 $\frac{3}{8}$	1	2.50	65
NG-373	Nozzle Internal Mix Assembly #703		3	1	4.25	65
PR-7	Body, Regulator		12	1	5.45	69
PR-8	Bonnet, Regulator		9 $\frac{1}{8}$	2	2.00	69
PR-9	Screw, Wing		1 $\frac{1}{4}$	2	.90	69
PR-10	Button, Spring		$\frac{1}{4}$	2	.35	69
PR-11	Spring, Diaphragm		1 $\frac{3}{4}$	2	.40	69
PR-12	Button, Diaphragm		$\frac{3}{4}$	2	.70	69
PR-13	Diaphragm		$\frac{1}{4}$	2	.30	69
PR-15	Disc		$\frac{1}{4}$	2	.90	69

PARTS PRICE LIST—Cont.

<i>Part No.</i>	<i>Description</i>	<i>Weight</i> <i>Lbs. Oz.</i>	<i>Qu.</i>	<i>Price</i> <i>Each</i>	<i>Page</i> <i>No.</i>
PR-17	Pin, Push	*	2	.55	69
PR-18	Seat	1	2	.90	69
PR-19	Stem	$\frac{1}{4}$	2	.60	69
PR-22	Spring, Valve	*	2	.30	69
PR-23	Screen, Regulator	*	2	.70	69
PR-24	Cap	$1\frac{1}{4}$	2	.90	69
PR-26	Screw, Bonnet (10-32x $\frac{5}{8}$ " Fillister Head, Steel Machine Screw)	$\frac{1}{8}$	12	.10	69
PR-39	Nut, Lock	$\frac{1}{4}$	2	.35	69
R-118	Nut, Needle Valve Packing Assembly	$\frac{3}{8}$	1	.60	65
R-131	Nozzle, Air, R-3	$\frac{1}{4}$	1	1.75	75
R-225	Stem, Release Valve	$\frac{1}{4}$	1	.35	71-73
R-230	Cap, Inlet Valve	*	1	.30	71-73
R-231	Spring, Inlet Valve	*	1	.10	71-73
R-232	Stud, Inlet Valve	*	1	.35	71-73
R-601	Nozzle, Material—JA	$\frac{3}{8}$	1	1.75	75
R-618	Cup	$5\frac{1}{8}$	1	1.20	71-73
SB-8	Valve, $\frac{1}{8}$ Release Assembly	1	1	.70	69
SB-9	Body, $\frac{1}{8}$ Release Valve	$\frac{1}{2}$	1	.35	69
SB-10	Stem, $\frac{1}{8}$ Release Valve	$\frac{1}{2}$	1	.35	69
SC-264	Connection, $\frac{5}{16}$ Hose, Complete	$1\frac{1}{4}$	2	.65	79
SC-265	Connection, $\frac{3}{8}$ Hose, Complete	2	4	.70	79
SC-266	Nut, Swivel	$\frac{1}{2}$	1	.30	71-73
T-58	Needle, Valve	1	1	3.60	75
T-130	Needle, Valve	1	1	3.60	75
T-145	Body	$12\frac{1}{2}$	1	11.40	75
T-181	Body	$12\frac{1}{2}$	1	11.40	75
T-701	Nozzle, Air 36P	$2\frac{1}{4}$	1	2.40	63
T-702	Nozzle, Material, 36SS	$1\frac{3}{4}$	1	2.40	63
T-703	Valve, Material Needle, 36SS	$\frac{1}{2}$	1	1.25	63
T-704	Retainer Ring	$1\frac{3}{4}$	1	1.45	63
T-717	Housing, Material Control	$1\frac{1}{2}$	1	1.15	63
T-718	Sleeve, Pusher, Assembly	$\frac{1}{4}$	1	.90	63
T-721	Retainer, Material Control Wiper Cup	$\frac{1}{8}$	1	.35	63
T-722	Wiper Cup	*	2	.05	63
T-723	Gasket, Material Control	*	1	.10	63
T-724	Control, Material, Assembly	$1\frac{3}{8}$	1	1.35	63

PARTS PRICE LIST—Cont.

Part No.	Description	Weight		Qu.	Price Each	Page No.
		Lbs.	Oz.			
T-725	Screw, Material Control Spring Retainer		¼	1	.40	63
T-726	Control Screw, Material		1	1	.60	63
T-727	Ring, Material Control Spring		*	1	.10	63
T-728	Spring, Material Control		⅛	1	.25	63
T-729	Control, Side Port, Assembly		2	1	3.80	63
T-730	Stem, Side Port Control Assembly		½	1	1.15	63
T-734	Housing, Side Port Control		½	1	.75	63
T-735	Spindle, Side Port Control		*	1	.90	63
T-736	Spring, Side Port Control		*	1	.10	63
T-737	Washer, Side Port Control		*	1	.10	63
T-738	Packing		*	1	.05	63 & 65
T-739	Gasket, Side Port Control		*	1	.05	63
T-740	Key, Side Port Control		½	1	.55	63
T-741	Screw, Side Port Control Key (8-32x⅜" Fillister Head Steel Machine Screw)		*	1	.10	63
T-742	Washer (#1906 Shakeproof Internal)		*	1	.05	63
T-744	Valve, Air, Stem Assembly		⅛	1	.55	63
T-747	Packing		*	2	.05	63 & 65
T-748	Nut, Air Valve Packing		*	1	.30	63
T-749	Gasket, Air Valve		*	1	.05	63
T-750	Spring, Air Valve		*	1	.20	63 & 65
T-751	Body, Air Valve		¾	1	1.25	63
T-752	Screw, Set (10-24x⅜ Allen Head Cup Point)		*	1	.05	63
T-753	Trigger Assembly		2	1	1.60	63
T-759	Screw, Trigger		⅛	1	.50	63
T-760	Stud, Trigger		*	1	.50	63
T-762	Nut, Front Lock		⅛	1	.35	75
T-763	Nut, Rear Lock		⅛	1	.30	75
T-764	Packing, Material Needle Valve		*	1	.10	63
T-765	Nut, Needle Packing Assembly		¼	1	.70	63
T-780	Retainer Ring		1½	1	3.00	75
T-861	Body, Air Nozzle, Internal Mix		1¾	1	1.70	63
T-862	Tip, Air Nozzle, Internal Mix #703		⅝	1	1.75	63-65
T-863	Nozzle, Internal Mix Assembly #703		2⅜	1	3.45	63
T-901	Nozzle, Material 66SS		1⅜	1	2.40	65

PARTS PRICE LIST—Cont.

Part No.	Description	Weight		Qu.	Price Each	Page No.
		Lbs.	Oz.			
T-903	Nozzle, Air, Assembly 63P		25/8	1	3.45	65
T-918	Gasket, Material Nozzle		*	1	.05	65
T-923	Body, Gun		13 1/2	1	14.90	63
T-1007	Screw, Material Control		5/8	1	.35	65
T-1008	Nut, Needle Lock		1/8	2	.30	65-75
T-1009	Guide, Needle		3/8	2	.35	65-75
T-1010	Body, Air Valve		1/2	1	1.25	65
T-1013	Body, Material Control		7/8	1	.45	65
T-1014	Pin, Side Port Control		*	1	.10	65
T-1015	Washer, Side Port Control		*	1	.10	65
T-1016	Washer, Packing		*	2	.05	65
T-1017	Body, Side Port Control		1/4	1	.35	65
T-1020	Stud, Trigger		3/16	1	.45	65
T-1023	Screw, Side Port Control		7/8	1	.70	65
T-1024	Control, Side Port, Assembly		13/16	1	1.50	65
T-1025	Stem, Air Valve, Assembly		1/4	1	.50	65
T-1026	Trigger		13/4	1	1.35	65
T-1028	Needle, Complete #15 SS		5/8	1	1.25	65
T-1032	Body	1	4 1/2	1	9.85	65
T-1033	Connection, Air		3/4	1	.50	63-65
X-824	Screw, Packing Gland (5/16x1/4 Hex Head Steel Cap Screw)		1/2	2	.10	67
X-1048	Screw, Disc (5-40x3/8 Flat Head Brass Machine Screw)		*	4	.10	69
X-1194	Seal, Oil (Git Manufacturing Co. #OS-625)		5/8	1	.70	67
X-1195	Pin, Cotter (1/8x3/4 Steel Cotter Pin)		1/8	6	.10	67
X-1433	Plate, Serial and Type		1/8	1	.20	67
X-1651	Wrench, 8" Adjustable (A-18 Crescent)		8 1/4	1	.95	80
X-1655	Gasket, Coupling (#2081 Inde- pendent Pneumatic Tool Co.)		1/8	2	.10	78
X-1671	Pin, Drive (#0x1/8, Type U Parker Kalon)		*	2	.05	67
X-1672	Coupling (#2070 Independent Pneumatic Tool Co.)		7 3/8	2	1.35	78
X-1673	Clamp, Hose, Complete (#2085 Independent Pneumatic Tool Co.)	1		2	.25	78

PARTS PRICE LIST—Cont.

<i>Part No.</i>	<i>Description</i>	<i>Weight</i>		<i>Qu.</i>	<i>Price Each</i>	<i>Page No.</i>
		<i>Lbs.</i>	<i>Oz.</i>			
X-1674	Screw Driver (#95 Yankee)		1¾	1	.55	80
43375	Bearing, Stuffing Box		1⅛	1	.20	67
44104	Hose, ¾ Air, 50 Feet Long, with Connections	9	6	2	14.90	79
44105	Hose, ⅝ Air, 30 Feet Long, with Connections	4	3	1	7.30	79
44106	Hose, ¾ Material, 30 Feet Long, with Connections	4	6	1	8.30	79
64729-1	Wrench, Combination Gun and Coupling		5⅞	1	.25	80
64729-3	Wrench, Combination Gun and Coupling		5⅞	1	.25	80

*Items so marked weigh less than ⅛ ounce.

